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INDEX OF ORAL HISTORIES RELATING TO NAVAL RESEARCH, DEVELOPMENT, AND ACQUISITION

by

David K. Allison
Joseph Marchese

JULY 1992

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PREFACE

In November 1984 my predecessor, Dr. David K. Allison, published an "Index of Oral Histories Relating to Naval Research and Development." It was unique because it provided information that, in many instances, had not appeared in print previously, much less within a single volume. The Navy's technical and historical communities justifiably lavished praise upon the endeavor.

Today an enlarged and revised index appears. It contains information about 240 additional oral histories, or almost twice as many as previously. Additionally, it incorporates improvements in the organization and presentation of information. The title has been changed to reflect the expanded scope of material treated within this book and to indicate that the Navy's organizations of RDT&E interact substantially with the private sector.

With one exception, all material in this book is self-explanatory. The "name index" identifies all persons mentioned and the pages on which references to these individuals are found.

Kindly direct inquiries regarding use of a specific oral history to the contact person listed for the repository holding the desired oral history. Each repository has its own guidelines.

I hope that you find this a useful index. I welcome your comments to improve it.

Joseph Marchese, Ph.D.
Historian
Navy Laboratory/Center Coordinating Group

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ABRAMS, BERNARD

Interviewer: Dr. Joseph Marchese

Date of Interview: August 28, 29 and September 9, 1989

Documentation: 3 tapes, 98 page transcript, index

Abstract: This interview involves a discussion of Naval torpedo development, especially in regard to the MK 48. Mr. Abrams first describes the MK 24 "mine" effort during World War II, and the conducting of related research at the Penn State University Ordnance Research Laboratory. He then treats the creation of the Rusk Development Company (which later became Clevite, and then Gould), and Dr. Fred Maxfield's work in early torpedo development. Additionally, he addresses the postwar developments of the MK 27 Model 4 and the MK 34, and comments on growth in torpedo design, especially in relation to fire control. The development of the MK 35 and the MK 37 are discussed next. Mr. Abrams also explains some of the advances in torpedo work made during the 1950's, such as new propulsion systems and fuels. He next discusses the beginning of the MK 48 program, including contract competition, the relationship between Westinghouse and the Ordnance Research Laboratory, Clevite's (Rusk's) development of the combfilter/homing system, and the key design features of Clevite's first versions of the MK 48 (the "100 Series"). An analysis of the 1969-70 tests of the Suspended Trainable Units and the shootout results follows. Mr. Abrams elaborates on the reasons that Clevite was awarded the contract over Westinghouse, and on the technical and production aspects of Clevite's development work. The interview concludes with a discussion on current military R&D efforts.

Repositories: DTRC

Individuals Mentioned:

Andreas, James
Andrews, Dr. Frank
Boswell, Vance
Brady, Dr. John
Duke, Gus
Hamlin, Hal
Hoyt, Jerry
Hunt, Dr. Fred
Knolls, Robert
Lynch, T. E.

Maher, CAPT David
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McNamara, Robert S.
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Institutions:

Bell Telephone Laboratories
Catholic University
Clevite Corporation (see Rusk Electronics Company)
David Taylor Model Basin
General Electric Company
General Physics Laboratory
Gould (see Rusk Electronics Company)
Harvard Underwater Sound Laboratory
Honeywell
Lockheed "Skunk Works"
Naval Mine Warfare Test Station (NMWTS)
Solomon's Island, MD
Naval Ordnance Laboratory
Naval Ordnance Plant (Forest Park, IL)

Naval Ordnance Test Station (NOTS)
Pasadena
Naval Postgraduate School (Monterey)
Naval Powder Factory (Indian Head, MD)
Naval Torpedo Station (NTS) Keyport, WA
Naval Torpedo Station (NTS) Newport, RI
Ordnance Research Laboratory (ORL),
later Applied Research Laboratory
(ARL) Penn State University
Rusk Electronics Company (Cleveland),
which becomes Rusk Development
Company, later Clevite Corporation,
later Gould
Sunstrand Corporation
Western Electric Company

Subjects:

Acoustic homing torpedoes
Aerospace industry
Contract competition
Fire control
Fixed-price contracts
Homing systems
Normal propyl nitrate
"Otto fuel"
Performance requirements
Propulsion systems

Research and development
Rusk/Clevite/Gould Corporation
Suspended trainable units
Swashplate engine
Torpedoes
Models
Structures
Tactics
Testing
U-boats

ABRAMS, ROBERT

Interviewer: Dr. David K. Allison

Date of Interview: July 5, 1983

Documentation: Two tapes, 8 page transcript, index

Abstract: Mr. Abrams reviews the history of the Office of the Director of Navy Laboratories, the creation of the office, the first personnel, selection of DNLs, and changes in the office over the past 17 years.

Repositories: DTRC

Individuals Mentioned:

Andrews, CAPT Albert
Crook, Mary Charlotte
Frosch, Dr. Robert A.
Gralla, VADM Arthur R.
Huang, Theodore S.
Hughes, David
Johnson, Dr. Gerald

Kleback, Thomas
Langille, CAPT John
Parrish, CAPT David
Smith, Dr. Howard C.
Teller, Dr. Edward
Towle, CAPT Bernard
Volmut, Rosemary

Institutions:

Bureau of Ordnance
Bureau of Ships
Bureau of Weapons
Deputy Chief of Naval Material
(Laboratories)

Director of Navy Laboratories
Naval Material Command
Navy Science Assistance Program

Other Entries:

Dillon Report
Director of Navy Laboratories (DNL)
Hermann Study

Laboratory consolidations
Laboratory management
Reduction-in-force

ADAMS, A. J.
BALDWIN, DR. RALPH B.
BURKE, ADM ARLEIGH A.
CLEMENT, LEWIS M.
FORD, CURRY
HAFSTAD, DR. LAWRENCE R.
HUSSEY, VADM GEORGE F.
MINTER, JERRY
OFFENHAUSER, WILLIAM
PEARCE, JOHN
SCHWEDE, HAROLD
SPRAGUE, ROBERT C.
TROTTER, DR. HERBERT

Interviewer: Unknown

Date of Interview: November 17, 1978

Documentation: 100 page transcript

Abstract: This is a transcript of the Annual Conference of the Radio Club of America. The participants reminisce about their roles and the roles of their agencies in the development of the proximity fuze. The manufacturing process was highly compartmentalized, thus many interviews deal with components of the fuze--the batteries and capacitors, and differences in assembly line procedures at plants. ADM Burke discusses the actual use of the fuzes, and Dr. Ralph B. Baldwin describes the effect of the fuze on the German war machine. Several interviews are about testing at the Naval Proving Ground.

Repositories: NHC, DTRC

Individuals Mentioned:

Brooks, Dr. Lester
Currie, Dr. Lauchlin M.
McPherson, Dr. Herbert G.

Parsons, RADM William S.
Robinson, Dr. Preston
Tuve, Dr. Merle

Institutions:

Baldwin Piano Company
Bureau of Ordnance
Crosley Corporation
Department of Terrestrial Magnetism
Eastman Kodak Company
Hoover Company
Johns Hopkins University/Applied Physics
Laboratory

McQuay-Norris Corporation
Naval Proving Ground
Office of Scientific Research and
Development
U.S. Army

Subjects:

Artillery
Ordnance

Other Entries:

Proximity fuze

ADKINS, DR. JOHN

Interviewer: Vincent Ponko, Jr.

Date of Interview: April 9, 1981

Documentation: 2 tapes, 48 page transcript, index

Abstract: Dr. Adkins talks about his first R&D appointment as head of Geophysics at the Office of Naval Research, his promotion to Assistant Chief Scientist of ONR, and studies of R&D during the McNamara Era. He discusses the work of the Naval Research Advisory Committee, the unilinear Navy, and Dr. Chalmers Sherwin and the Sherwin Plan for reorganizing the laboratories of the Department of Defense. Adkins also comments on the role of in-house laboratories in the Navy, the Mansfield Amendment, and the Blue Ribbon Defense Panel. He describes Navy Industrial Funding and Project REFLEX, ONR's relationship with other agencies and military-civilian relationships in the Navy. Adkins explains the impact of the creation of the National Science Foundation on the Office of Naval Research and the effect of centralized management on Navy research and development.

Repositories: DTRC

Individuals Mentioned:

Kennedy, John F.
Sherwin, Dr. Chalmers

Institutions:

National Science Foundation
Naval Research Advisory Committee
Office of Naval Research

Subjects:

Blue Ribbon Defense Panel
Glass Report
Mansfield Amendment
Military-civilian relationships
Navy Industrial Fund

Office of Naval Research
Project REFLEX
Sherwin Plan
Unilinear Navy

AGNEW, HAROLD

Interviewer: Albert B. Christman

Date of Interview: January 1967

Documentation: 22 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mr. Agnew discusses Parsons and Dr. Norman Ramsey at Tinian and the test flights from there. He also reflects on the uses of small nuclear weapons and the communication problems involved.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Parsons, RADM William S.

Ramsey, Dr. Norman

Subjects:

Manhattan Project

Parsons, RADM William S.

ALLARD, DR. DEAN C.

ALLISON, DR. DAVID K.

Interviewer: Leroy L. Doig, III

Date of Interview: May 1985

Documentation: Videotape, 16 page transcript

Abstract: Drs. Allard and Allison provide a brief discussion of the origins of radar and of the requirements for antiradar. This interview was conducted as part of a large group of interviews that were used to support a classified project.

Repositories: NWC

Institutions:

Naval Weapons Center

Navy Research Laboratory

Other Entries:

Defense suppression

Radar origins

World War II

ALPERS, FREDERICK C.
FLETCHER, DR. ROBERT C.

Interviewer: Leroy L. Doig, III.

Date of Interview: January 27, 1981

Documentation: 89 page transcript, index

Abstract: Mr. Alpers details early missile work on the Bat and Pelican missiles at the National Bureau of Standards. He talks about German contributions to missile research, wartime supply problems, and postwar developments of Bat II and Corvus. Alpers discusses the search for nuclear weapons and the shift in missile research to the Naval Ordnance Laboratory at Corona, California. He mentions the later move of NOL-Corona to the Naval Weapons Center-China Lake and the work on Walleye II and Puma missiles. In addition, Alpers explains the current trends in R&D and his contributions to the Naval Weapons Center.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

McLean, Dr. William B.
Riggs, Leroy

Institutions:

National Bureau of Standards
Naval Ordnance Laboratory
Naval Weapons Center

Subjects:

Missile research
Research and development

Other Entries:

Bat II Missile	Puma Missile Project
Corvus Missile	Walleye missile project

ALPERS, FREDERICK C.

Interviewer: Leroy L. Doig, III

Date of Interview: November 16, 1982

Documentation: Tapes, 76 page transcript, 22 photographs, index

Abstract: This is a special-subject interview intended to both preserve corporate memory and facilitate the development of an exhibit on the earliest U.S. guided missiles. Mr. Alpers was involved with the development of these systems at BuStan, NOLC, and NWC. The interview is keyed to a set of photographs of models of the missiles/missile concepts under discussion. Mr. Alpers discusses the development of Moth, Pelican, Robin, Bat, Bat II/BATTU, Corvus, Petrel, Grebe, Puffin, E-O Bullpup, Flycatcher, Gnatcatcher, Mockingbird, Bobcat (a.k.a. Modular ASM and "Convertabomb"), Standoff Tactical Missile, Puma, Walleye II, Butcherbird (Bullpup ARM), Shrike, Standard ARM, Gannett, and Advanced Standoff Missile. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Etheridge, CAPT Melvin R.
Ward, Dr. Newton E.
Wilson, Dr. Haskell G.

Institutions:

National Bureau of Standards
Naval Ordnance Laboratory
Naval Weapons Center

Other Entries:

Bureau of Standards (BuStan) missile programs
Defense suppression
Missile development

ALPERS, FREDERICK C.

Interviewer: Leroy L. Doig III

Date of Interview: 1984

Documentation: Videotapes, transcript

Abstract: Interview conducted as background material for special project for Electronic Warfare Department.

Repositories: NWC

Institutions:

Electronic Warfare Department
Naval Weapons Center

Other Entries:

Antiradiation missile
Electronic warfare

ALVAREZ, DR. LUIS W.

Interviewer: Albert B. Christman

Date of Interview: March 1967

Documentation: 32 page transcript

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Alvarez assesses Parsons' role in the Manhattan Project, as well as his own. He describes Parsons' missions on the Enola Gay and Parsons' promotion from Captain to Commodore to Rear Admiral. Alvarez also explains the role of the Los Alamos laboratory in atomic research and development.

Repositories: DTRC, NWC

Individuals Mentioned:

Lauritsen, Dr. Charles C.
Oppenheimer, Dr. Robert

Parsons, RADM William S.
Tibbets, COL Paul

Institutions:

Naval Ordnance Test Station

Subjects:

Atomic research
Manhattan Project
Parsons, RADM William S.

AMLIE, DR. THOMAS S.

Interviewer: Michelle Ballinger

Date of Interview: August 24, 1976

Documentation: 27 page transcript, index

Abstract: Dr. Amlie comments on the qualities the technical director of a laboratory should have, his education, and his military service. He reflects on his career at NWC, first working on the Sidewinder missile and then as technical director. Dr. Amlie discusses problems with the Condor and Harpoon missile programs and SARAH, a radar guided version of Sidewinder. He describes his job as Technical Director, his work with the FAA, and his hobbies, including old cars and a penchant for Shakespeare.

Repositories: NWC, DTRC

Individuals Mentioned:

Amlie, Dr. June
McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Federal Aviation Administration
Naval Weapons Center

Subjects:

Missile research

Other Entries:

Condor Missile
Harpoon Missile Project
Semi-active Radar Homing (SARAH) Missile
Project

Sidewinder Missile Project
Technical directors

AMLIE, DR. THOMAS S.
CARTWRIGHT, DR. W. FRANK
CRAWFORD, JACK A.
DONALDSON, EARL J.
SCHREIBER, J. RAYMOND
SMITH, CHARLES P.
WARD, DR. NEWTON E.
WILCOX, DR. HOWARD A.
WILSON, DR. HASKELL G.

Interviewers: William F. Wright and Budd Gott

Date of Interview: March 14, 1980

Documentation: 101 page transcript, index

Abstract: This is a group discussion on the occasion of the reunion of the Air Ordnance Department at NOTS. The goals of weapon design, Sidewinder from its start to its finished product, and Dr. William B. McLean as Technical Director are discussed. They describe NOTS' role in the Korean War, Dr. L. T. E. Thompson's management style, and NOTS' relations with Washington. Also included are sections on the 1967 reorganization of the Navy, R&D at NOTS, Dr. Amlie as Technical Director, and changes in the NOTS-NWC management philosophy.

Repositories: NWC, DTRC

Individuals Mentioned:

LaBerge, Dr. Walter B.
McLean, Dr. William B.

Parsons, RADM William S.
Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Korean War
McLean, Dr. William B.
Naval Ordnance Test Station

Sidewinder missile project
Thompson, Dr. Louis T. E.

AMLIE, DR. THOMAS S.

Interviewer: Leroy L. Doig, III

Date of Interview: June 30, 1983

Documentation: Tapes, 24 page transcript, index

Abstract: Dr. Amlie briefly discusses several missile development programs, including Sidewinder (IRAH and SARAH), Walleye, and Agile; NWC relationships with Headquarters and with the Air Force; multiservice programs and interservice competition; problem programs (e.g., F/A-18, F-111, and AMRAAM); "black" programs; and laboratory missions. Dr. Amlie also discusses his tenure as NWC Technical Director, his goals, the problems with the job, and the roles of the Commander and TD. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Connolly, VADM Thomas F.
Etheridge, CAPT Melvin R.
Hays, Burrell W.

McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Naval Weapons Center

Other Entries:

Advanced medium range air-to-air
missile
Agile Missile Program
"Black" programs
Competitive procurement
F-111

F/A-18
Interservice programs
Sidewinder Missile Project
Technical directors
Vietnam war, laboratory support
Walleye missile project

ANDERSON, DR. CARL

Interviewer: Albert B. Christman

Date of Interview: October 3, 1970

Documentation: 14 page transcript, index

Abstract: Dr. Anderson details his early involvement in the CalTech rocket program and recalls an important meeting at CalTech concerning forward firing rockets and the need for an officer/rocket czar. He discusses military-civilian relationships at NOTS and his trip to Europe to assess rockets first hand in 1944. Anderson also comments on putting launchers in B-18 aircraft.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Lauritsen, Dr. Charles C.

Institutions:

California Institute of Technology
Naval Ordnance Test Station

Other Entries:

B-18 bomber
Military-civilian relationships

Rocket launchers
Rocket research

ANDERSON, EVAN

Interviewer: Dr. Vincent Ponko, Jr.

Date of Interview: November 4, 1980

Documentation: 2 tapes, 29 page transcript, index

Abstract: Mr. Anderson describes his work with the government before 1962 at the Franklin Arsenal, Diamond Ordnance Fuze Laboratory, and the Special Assistant to the Chief of Ordnance. He recalls his selection as a staff member in the Office of the Secretary of Defense and his work in the Base Utilization Division. Anderson talks about his transfer to the office of Director of Defense Research and Engineering (DDR&E) in 1966 and his relationships with Dr. Chalmers Sherwin and Dr. Edward Glass. He discusses studies and reports done at DDR&E, his associations with DNL/DLP and ASN (R&D), and military-civilian relationships in R&D. Anderson comments on Navy R&D efforts and opportunities in the McNamara and Laird eras, Congress' role in R&D, and his duties at the National Science Foundation.

Repositories: DTRC

Individuals Mentioned:

Glass, Dr. Edward
Johnson, Dr. Gerald
Sherwin, Dr. Chalmers

Institutions:

Assistant Secretary of the Navy (R&D)	Director of Navy Laboratories
Director of Defense Research and Engineering	Franklin Arsenal
Director of Laboratory Programs	National Science Foundation

Other Entries:

Director of Defense Research and Engineering
Research and development
Sherwin Plan

ANDREWS, RADM B. F.

Date of Interview: September 12, 1974

Documentation: 2 tapes

Repositories: DTRC

ANDREWS, DR. DAN

Interviewer: Albert B. Christman

Date of Interview: March 1978

Documentation: 13 page transcript

Abstract: Dr. Andrews discusses his work at NOTS and NOSC during World War II and after, the differences between wartime and peacetime funding, and bureaucratic problems created by Navy reorganizations. He talks about doing contract work for industry, in particular, compartmentalization and the resulting loss in quality. He mentions profit as industry's motivating factor.

Repositories: DTRC

Institutions:

Naval Ocean Systems Center
Naval Ordnance Test Station

Subjects:

Contracting
Funding

APPLETON, ROBERT
DESANTO, JAMES D.

Interviewer: A. B. Christman

Date of Interview: April 15, 1969

Documentation: 31 page transcript, index

Abstract: Appleton and DeSanto discuss early rocket work within Section H of NDRC; construction at the Naval Powder Factory (Indian Head) and the roles of Lauritsen and Hickman; differences in propellant types and the bazooka rocket; changing military receptions of the rocket and aircraft testing; the involvement of the Bureau of Standards and Cal Tech in rocketry; administration of rocket work, early efforts, first impressions, and living conditions at China Lake.

Repositories: DTRC

Individuals Mentioned:

Goddard, Dr. Robert
Hickman, Dr. Roy Scott
Lauritsen, Dr. Charles C.

Institutions:

National Bureau of Standards	NDRC
Naval Powder Factory	OSRD

Subjects:

Rockets

Other Entries:

Jet-assisted take off
Variable Time (VT) fuzes

ARNOLD, RADM HENRY

Interviewer: Dr. Joseph Marchese

Date of Interview: February 20, 1960

Documentation: 1 tape, 20 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of the Naval Material Command (NAVMAT) and the establishment of the Space and Naval Warfare Systems Command (SPAWAR). RADM Arnold discusses the Naval Electronic Systems Command's (NAVELEX) primary functions, its status relative to the Naval Sea Systems Command and the Naval Air Systems Command, and the changes in its function during his tenure. He comments on the discrepancies between the systems commands' functions and the technical abilities of their employees. RADM Arnold discusses the disestablishment of the position of technical director at NAVELEX. NAVELEX'S interaction with the Navy's research and development centers, engineering stations, and the private sector is described next. RADM Arnold then comments upon the functional differences between directorate and project offices, and concludes with discourses on the optimization of the battleforce and the coordination of systems development and acquisition among the systems commands.

Repositories: DTRC

Individuals Mentioned:

Betterton, RADM Thomas
Lawson, Dr. Joel
Meyer, RADM Wayne

Moore, RADM Charles
Shaffer, RADM G. H. B.
Williams, ADM John G., Jr

Institutions:

Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Pentagon
Space and Naval Warfare Systems Command

Subjects:

Antisubmarine warfare (ASW)
Command control, and communication
Contract management
Disestablishment of NAVMAT
Distribution System
Engineering stations
Establishment of SPAWAR
Joint Tactical Information Distribution
System

Naval Electronic Systems Command
Navy Tactical Data System
Project offices
Reconnaissance, Electronic Warfare,
Special Operations, Intelligence
Evaluation (REWSON) Project
Systems engineering
Technical directors
Total force perspective and
optimization

ASHWORTH, VADM FREDERICK L.

Interviewer: Albert B. Christman

Date of Interview: April 10, 1969

Documentation: 98 page transcript, index

Abstract: This interview was conducted partly as background for a biography of RADM William S. Parsons and partly for inclusion in a history of Navy research and development. Ashworth talks about his initial contacts with Parsons, Parsons role in the Manhattan Project, and Parsons' flight to Hiroshima on the Enola Gay. He discusses Parsons' administrative talent and general disposition. Ashworth also comments on industry and the Navy and

weapons R&D, the effect of officers' short tours on R&D, and the military-industrial complex. Also included are segments on NWC and Navy R&D in general.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Blandy, ADM George
Farrell, GEN
Groves, LTG Leslie
Hayward, ADM John T.
McLean, Dr. William B.
McNamara, Robert S.
Oppenheimer, Dr. Robert

Parsons, RADM William S.
Ramsey, Dr. Norman
Rivero, ADM Horacio
Sweeney, MAJ Charles W.
Thompson, Dr. Louis T. E.
Tibbets, COL Paul

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Manhattan Project
Parsons, RADM William S.
Research and development

ASHWORTH, VADM FREDERICK L.

Interviewer: John Burnett

Date of Interview: 1956

Documentation: 62 page transcript

Abstract: VADM Ashworth describes the preparation behind the dropping of the atom bombs on Hiroshima and Nagasaki. He comments on the Hiroshima flight and the perfect timing of the run. Ashworth then details the Nagasaki flight-his role as weaponeer, CAPT Beahan's role as bombardier, the no drop situation at Krokura, and the flight from there to Nagasaki. In addition, Ashworth recalls the weather conditions at Nagasaki, plans to drop the bomb by radar if necessary, the fuel situation on the plane, and the emergency landing on Okinawa. Also included are comments on the roles of GEN Doolittle and GEN Groves and accuracy of the bomb drop.

Repositories: NWC, DTRC

Individuals Mentioned:

Beahan, CAPT
Doolittle, GEN James H.
Groves, LTG Leslie

Parsons, RADM William S.
Sweeney, MAJ Charles W.

Other Entries:

Enola Gay
Manhattan Project

ASHWORTH, VADM FREDERICK L.
HENDERSON, DR. J. E.

Interviewer: Albert B. Christman

Date of Interview: April 1969

Documentation: 38 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Henderson and Ashworth discuss Parsons' work as experimental officer at NPG and the testing of 500 pound bombs there in the summer of 1941. They comment on the need for a military-scientific liaison and Parsons' ability as a scientist. Henderson and Ashworth also talk about Parsons at the Bikini bomb tests, and as Deputy Chief of the Bureau of Ordnance, and about postwar Navy research and development..

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Lauritsen, Dr. Charles C.
Parsons, RADM William S.
Schuyler, CAPT Michael

Institutions:

Naval Proving Ground

Subjects:

Operation Crossroads
Parsons, RADM William S.
Research and development

BACHINSKI, ANTHONY J.

Interviewer: Leroy L. Doig, III

Date of Interview: February 27, 1987

Documentation: Tapes, 45 page transcript, index

Abstract: Mr. Bachinski discusses his career at NOTS and his long association with the Station's T&E ranges. Topics include the unique character of the old Aviation Ordnance Department, the development and instrumentation of several of the ranges, and the evolution of the ranges to meet needs discovered in Vietnam. ACCESS RESTRICTED

Repositories: NWC

Individuals Mentioned:

Forster, Robert H.	Krausman, Richard D.
Hart, Earl	LaBerge, Dr. Walter B.
Highberg, Dr. Ivar	Ward, Dr. Newton E.

Institutions:

Naval Weapons Center

Other Entries:

Aviation Ordnance Department
Test and Evaluation Ranges

BADDERS, WILLIAM

Interviewer: Dr. John T. Mason, Jr.

Date of Interview: September 14, 22, and November 8, 1971

Documentation: 157 page transcript

Abstract: A birth-to-present day oral memoir, concentrating on Chief Badder's 22 year career.

Repositories: USNI, USNA, NWC, NHC

Individuals Mentioned:

Ellsberg, LCDR Edward
Frazer, James W.

Hollowell, LCDR John A., Jr.
Saunders, CAPT Harold E.

Subjects:

Navy's diving and salvage programs

Other Entries:

McCann Chamber

USS S-4 (SS-108)

Momsen Lung

USS S-51 (SS-162)

Submarine rescue vessels

USS SQUALUS (SS-192)

Underwater welding

BAILEY, GARY

Interviewer: Linda Lou Crosby

Date of Interview: December 12, 1985

Documentation: 41 page transcript, index

Abstract: This interview was conducted as part of a video project proposed to commemorate the 75th anniversary of naval aviation. Bailey recalls 15 years of military and civilian work as a pilot for the Naval Weapons Center. He reminisces about several early accidents and mishaps involving drones, describes the camaraderie of the China Lake pilot community, and discusses the test pilot's role on the RDT&E team.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Conatser, Rosemary

Cook, Tom

Valencia, Gene

Institutions:

Air Test and Evaluation Squadron FIVE
Naval Air Station, Lemoore
Naval Weapons Center

Other Entries:

China Lake community
Drones

Research, development, test and
evaluation (RDT&E)
Test pilots

BAINBRIDGE, DR. KENNETH TOMPKINS

Interviewer: Unknown

Date of Interview: 1960

Documentation: 150 page transcript

Abstract: Dr. Bainbridge talks of his education and early research at MIT, the creation of the NDRC Radiation Laboratory at MIT in 1940, the 1941 technical mission to England on radar development, and testing the first atom bomb.

Repositories: COL

Individuals Mentioned:

Compton, Karl
Oppenheimer, Dr. Robert

Smyth, Henry D.
Szilard, Dr. Leo

Institutions:

Massachusetts Institute of Technology
National Defense Research Committee
Radiation Laboratory

Subjects:

Manhattan Project
National Defense Research Committee Radiation Laboratory
Radar research

BAINBRIDGE, DR. KENNETH TOMPKINS

Interviewer: Albert B. Christman

Date of Interview: April 3, 1966

Documentation: 24 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Bainbridge first details his background and his initial impressions of Parsons at Los Alamos. Then he talks about Parsons' relationship with the officers and scientists on the Manhattan Project and U.S. Army and British input.

Repositories: NWC, DTRC

Individuals Mentioned:

Groves, LTG Leslie
Lauritsen, Dr. Charles C.

Oppenheimer, Dr. Robert
Parsons, RADM William S.

Subjects:

Enola Gay
Manhattan Project
Parsons, RADM William S.
Variable Time (VT) fuzes

BAKER, WALTER L.

Interviewer: Richard D. Glasow

Date of Interview: August 18, 1980

Documentation: 2 tapes, transcript

Abstract: Mr. Baker discusses his career at the Applied Research Laboratory of Pennsylvania State University.

Repositories: ARL

Institutions:

Applied Research Laboratory/Pennsylvania State University
Ordnance Research Laboratory/Pennsylvania State University

Other Entries:

Acoustics research

BALLENTINE, ADM JOHN JENNINGS

Interviewer: Unknown

Date of Interview: 1964

Documentation: 758 page transcript

Abstract: Of interest in this interview are ADM Ballentine's experiences in testing and development, his work at the Naval Proving Ground, and his involvement in the development of the Norden bombsight.

Repositories: COL, NHC

Individuals Mentioned:

King, FADM Ernest

Institutions:

Naval Proving Ground

Other Entries:

Naval aviation
Norden Bombsight
Testing and development

BARNABY, CAPT RALPH

Interviewer: Albert B. Christman

Date of Interview: April 1978

Documentation: Tape, 32 page transcript

Abstract: CAPT Barnaby talks about his background in aviation, his early days in the Navy, and his duties during World War I. He discusses inter-war Naval aviation research and the design and evaluation of aircraft. Barnaby describes aviation work during World War II and his tenure as CO of NADC.

Repositories: DTRC

Institutions:

Boeing Airplane Company
Naval Aviation Development Center

Subjects:

Aviation research

BASTEDO, GEORGE

Interviewer: Mickey Strang

Date of Interview: April 16, 1975

Documentation: 13 page transcript, index

Abstract: Mr. Bastedo discusses his work on various missile projects, including Bat, Dove, Petrel, Terrier, and Sidewinder. He describes his work at the Bureau of Standards, the establishment of NOL at Corona, CA, and his transfer to the Naval Weapons Center.

Repositories: NWC, DTRC

Individuals Mentioned:

Sams, Gerald R.

Institutions:

Bureau of Aeronautics
Bureau of Ordnance

Bureau of Standards
Naval Weapons Center

Other Entries:

Bat missile
Dove missile project
Establishment of Naval Ordnance
Laboratory

Petrel missile
Sidewinder missile project
Terrier missile

BATZLER, RADM JACK

Interviewer: Dr. Joseph Marchese

Date of Interview: March 8, 1990

Documentation: 1 tape, 31 page transcript, index

Abstract: This interview is one in series conducted to gather information on the disestablishment of the NAVMAT and the establishment of SPAWAR. RADM Batzler provides a background of his military career and gives information pertaining to his being selected as the first director of SPAWAR 30, the Warfare Systems Architecture and Engineering (WSA&E) Directorate. He provides insight into the continuing problems with systems integration and discusses warfare areas covered by WSA&E. RADM Batzler then details SPAWAR 30's attempts to integrate command, control, communication and intelligence (C3I) across directorates in SPAWAR. RADM Batzler discusses the staffing of SPAWAR 30 and states why he was selected to direct that organization. He also addresses the reasons behind the limited direct funding for SPAWAR 30 and how the funding issue remains ambiguous, raising questions about how the Navy operates. RADM Batzler elaborates on the decision-making process in Washington, DC and specifically doubts that personalities had a major effect on the slow acceptance of WSA&E. He discourses on the process of taking proposals before the CNO Executive Board and discusses the roles of requirement teams in the Office of the Chief of Naval Operations. RADM Batzler further deals with issues regarding WSA&E such as the splitting of its major elements in SPAWAR, the difficulty SPAWAR has in cutting across other systems commands with WSA&E, as well as the issue of whether COMSPAWAR should have gone to the Secretary of the Navy for more support. He concludes by discussing the continued preference within the Navy for products over concepts and he suggests other interviewees.

Repositories: DTRC

Individuals Mentioned:

Brooks, RADM Dennis
Busey, ADM James
Clark, VADM Glenwood
DeMars, VADM Bruce
Doak, Robert
Grich, RADM Richard
Hardistey, ADM Huntington
Hogg, ADM James

Langston, CDR Marvin
Lehman, John
McGrail, RADM C. R.
Meyer, RADM Wayne
Paisley, Melvyn
Taft, William H., IV
Wessel, Paul

Institutions:

Department of Defense
Department of the Navy
Johns Hopkins University/Applied Physics
Laboratory
Joint Chiefs of Staff
Naval Air Systems Command
Naval Electronic Systems Command

Naval Sea Systems Command
Nuclear Power School
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command
U.S. Naval Academy
University of California

Subjects:

Acquisition process
AEGIS program
Antiair warfare
Antisubmarine warfare (ASW)
Chief of Naval Operations
Command control, communication, and
intelligence
Command support system
Disestablishment of NAVMAT
Electronic warfare
Establishment of SPAWAR

Master plans
Naval warfare
Research and development
Statutory authority
Systems integration
Tactical decision system
Tentative operational requirements
Warfare support system
Warfare systems architecture and
engineering;

BAUM, DR. WILLIAM A.

Interviewer: Dr. David H. DeVorkin

Date of Interview: January 12, 1981

Documentation: Tapes, 26 page transcript

Abstract: Dr. Baum discusses his family background and training, World War II involvement with the Caltech rocket project, and his career at the Naval Research Laboratory. At NRL he first worked in fire control, then on constructing the ultraviolet solar spectrograph for V-2 rocket flights. He describes technical difficulties with the solar spectrograph, his contact with von Braun and other German rocket scientists, V-2 firings at White Sands in 1946, co-workers, his doctoral thesis, and accepting a position at Mount Wilson observatory.

Repositories: NASM

Individuals Mentioned:

Braun, Wernher von
Lyman, Theodore
Strong, John

Tousey, Dr. Richard
Wood, R. W.

Institutions:

California Institute of Technology
Naval Research Laboratory

Subjects:

Astrophysics

Other Entries:

Fire control
Ultraviolet solar spectroscopy
V-2 Rocket

BEACH, CAPT EDWARD LATIMER

Interviewer: Unknown

Date of Interview: 1967

Documentation: 470 page transcript

Abstract: CAPT Beach recalls his World War II submarine service, and the development of atomic submarines.

Repositories: COL, NHC

Individuals Mentioned:

Rickover, ADM Hyman

Other Entries:

Atomic submarines

BEACH, DR. EUGENE H.

Interviewer: Albert B. Christman

Date of Interview: March 31, 1978

Documentation: 17 page transcript

Abstract: Dr. Beach comments on NOL's move to the Navy Yard in 1941, and in particular on the leadership of Dr. Duncan and Dr. McLean, on wartime research and development, and on the commitment of the scientists involved. He talks about the turnover in personnel after the war and the reduction in workload in peacetime. Beach discusses the mission of NSWC and the effort to further define it. He also mentions duplication in the labs, and describes the consolidation of NOL and NWL into NSWC in 1974 and subsequent reorganizations. He explains the role of commanding officers in recent times.

Repositories: DTRC

Individuals Mentioned:

Bennett, Dr. Ralph
Duncan, Dr.

Hartmann, Dr. Gregory
McLean, Dr. William B.

Institutions:

Naval Ordnance Laboratory
Naval Surface Weapons Center

Naval Weapons Laboratory
Washington Navy Yard

Subjects:
Research and development

BEACH, DR. EUGENE H.

Interviewer: Dr. Joseph Marchese

Date of Interview: July 18, 1989

Documentation: 2 tapes

Abstract: This interview is one of a series conducted to gather material for a history of the development of the MK 48 Torpedo. Dr. Beach was involved with the Underwater Electrical Engineering Department at the Navy Ordnance Laboratory, White Oak, during the development of the MK 48, and describes the design, development, and testing of the torpedo exploders used in the MK 48, and his impressions of the development of the overall torpedo. A large section of this interview is given over to an extensive discussion of torpedo exploder design. Beach also comments on the evaluation of the shootout, the "war shots" made with the MK 48 Mod 1 in Dabob Bay, the "conflict of interest" inherent in NOL's involvement in both the Clevite and Westinghouse versions of the MK 48, the decision to move the MK 48 program from NOL to the Naval Underwater Systems Center, the assignment of torpedo development missions in the Navy R&D community and later fixes/modifications of the MK 48. Dr. Beach concludes with a description of his subsequent professional activities.

Repositories: DTRC

Institutions:

Clevite Corporation
Naval Ordnance Laboratory
Naval Ordnance Test Station

Naval Underwater Systems Center
Ordnance Research Laboratory/
Pennsylvania State University
Westinghouse Electric Company

Subjects:

Cone filter
Homing systems
Propulsion systems
washplate engine

Torpedo development
Torpedo exploders
Warhead development
Wire guidance

BECKMANN, CAPT ALCORN G.

Interviewer: Albert B. Christman

Date of Interview: May 1968

Documentation: 38 page transcript, index

Abstract: CAPT Beckmann discusses his time at NOTS from June 1946 to June 1947, including comments on the CO, CAPT James Sykes, the effectiveness of the laboratory workforce, and technical/scientific staff. He also describes his pre-NOTS career.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Brode, Dr. Wallace
Bush, Dr. Vannevar
Hussey, VADM George F.
Richmond, CDR John

Sage, Dr. Bruce
Sykes, RADM James B.
Thompson, Dr. Louis T. E.
Warner, Dr. Arthur H.

Institutions:

Naval Ordnance Test Station

Subjects:

Naval Ordnance Test Station

BELZER, JACK

Interviewer: Steven J. Dick

Date of Interview: June 8, 1988

Documentation: Tape

Abstract: Mr. Balzer discusses his years at the Naval Observatory, 1938-45.

Repositories: USNO

Subjects:

Astronomy
Computerization
Nautical Almanac Office

BENDER, CAPT JAMES

Interviewer: Dr. Joseph Marchese

Date of interview: August 1, 1989

Documentation: 1 tape, 24 page transcript, index

Abstract: This interview is one of a series conducted to obtain material for a history of the development of the MK 48 Torpedo. Bender discusses his background, education, Navy career, and involvement in the MK 48 Torpedo program. Bender was program project officer at OPNAV for the MK 48, 1973-76. The interview concentrates on aspects of the Clevite/Westinghouse competition for the contracts to produce the MK 48, the evaluation of proposed designs, the evaluation of test results, the awarding of the contracts, the creation of the Advanced Capabilities (ADCAP) Torpedo Program, and the development and fleet introduction of the MK 48 ADCAP torpedo.

Repositories: DTRC

Institutions:

Clevite Corporation
Defense Systems Acquisitions Review
Council
Department of the Navy Systems
Acquisition Review Council
Field Activities Material Command
General Dynamics

Naval Material Command
Naval Sea Systems Command
Naval Underwater Systems Center
Office of the Chief of Naval Operations
Operational Test & Evaluation Force
Westinghouse Electric Company

Subjects:

Advanced Capability (ADCAP) Torpedo
Contract competition
Fixed-cost contracting
MK 48 torpedo

Systems acquisition
Test and evaluation
Torpedo development

BERGSTRAHL, THOR

Interviewer: Dr. David H. DeVorkin

Date of Interview: August 1, 1983

Documentation: Tapes, 70 page transcript

Abstract: This interview contains descriptions of Bergstralh's background and schooling, radar school at MIT and Bowdin, his recruitment by NRL after World War II, and interest in upper atmosphere research. He discusses his work on the V-2, procedures at White Sands, co-workers, the Viking and Aerobee projects, rocket impact point prediction systems, cosmic ray research, and the NRL nuclear reactor. He describes his later position at Ford Aeronautics, and Ford's involvement with lunar and planetary exploration.

Repositories: NASM

Individuals Mentioned:

Alter, Dr. Dinsmore
Blifford, I. H.
Havens, Dr. Ralph J.
Krause, Dr. Ernst H.

Rosen, Milton
Tombaugh, Clyde
Tousey, Dr. Richard

Institutions:

Ford Aeronautics
Massachusetts Institute of Technology

Naval Research Laboratory
University of Minnesota

Subjects:

Navigation
Nuclear reactors
Physics

Rocketry
Telemetry

Other Entries

Aerobee rocket
Cosmic ray research
Lunar research
Navy Navigation Satellite (NAVSTAR)

Ranger hard lander
Solar spectrograph
V-2 rocket
Viking rocket

BERMAN, DR. ALAN

Interviewer: Dr. Vincent Ponko, Jr.

Date of Interview: September 22, 1980

Documentation: 2 tapes, 30 page transcript, index

Abstract: Dr. Berman talks about his motivation for accepting the position as Director of Research, NRL, his background at Hudson Laboratories, Columbia University, and the efficiency and productivity of the Navy R&D effort. He comments on placing Navy labs under the CNM, the establishment of the DNL/DLP, and military-civilian relationships in the labs. Berman evaluates the Civil Service Commission's policies on R&D, compares NRL with other labs, and describes his personal research and his management philosophy. He talks about the possible effects of putting NRL under the DNL, why it wasn't placed there in 1966, and the impact of visiting committees, reviews, and studies on NRL. He discusses technical guidance from the higher levels, coordination with other labs, and the use of colleges and universities. Berman compares the U.S. and Soviet R&D efforts, describes the Advanced Research Projects Agency, and suggests changes in the Navy's R&D organizational approach.

Repositories: DTRC

Individuals Mentioned:

Lawson, Dr. Joel

Morse, Dr. Robert W.

Probus, Dr. James H.

Smith, Dr. Howard C.

Institutions:

Advanced Research Projects Agency

Naval Research Laboratory

Office of Naval Research

Office of the Chief of Naval Material

Office of the Director of Laboratory Programs

Office of the Director of Navy Laboratories

Subjects:

Director of Navy Laboratories

Naval Research Laboratory

Research and development

BERMAN, DR. ALAN

Interviewer: Dr. John A. S. Pitts and Dr. David K. Allison

Date of Interview: June 3, 10, 19, and November 18, 1982

Documentation: 9 tapes, 140 page transcript

Abstract: Dr. Berman gives his perspective on Naval R&D policy making, R&D management initiatives at Hudson Laboratories and NRL, and Navy R&D requirements from 1952 to 1982. He also discusses the main thrusts of Hudson Labs' and NRL's research programs.

Repositories: DTRC, NRL

Subjects:

Hudson Laboratories
Naval Research Laboratory
Research and development

BERMAN, DR. ALAN

Interviewer: Dr. Joseph Marchese

Date of Interview: March 7, 1990

Documentation: 1 tape, 23 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Dr. Berman begins by discussing these two changes, including the ways in which SPAWAR differed from the old Naval Electronic Systems Command. He then describes the reasons why the WSA&E function was not placed within a restructured NAVMAT, but rather within a newly established systems command (SPAWAR). Dr. Berman also provides information on the transfer of research and development (R&D) centers to the Office of the Chief of Naval Research, and then to SPAWAR. He discusses the transfer of hardware programs into and out of SPAWAR. He considers in more detail than previously the transference of the R&D centers from the Secretariat to the operational side of the Navy (the systems command, SPAWAR). Dr. Berman assesses SPAWAR's effectiveness in managing the R&D Centers and in performing the WSA&E function. He includes in this topic the reasons for which the Office of the Chief of Naval Operations established parallel groups to work on WSA&E. Finally, Dr. Berman addresses WSA&E's inadequate funding.

Repositories: DTRC

Individuals Mentioned:

Clark, VADM Glenwood
Hogg, ADM James
Lehman, John

Paisley, Melvyn
Trost, ADM Carlisle

Institutions:

Naval Air Development Center
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Center

Naval Research Laboratory
Naval Sea Systems Command
Office of the Chief of Naval Operations
Office of the Chief of Naval Research
Space and Naval Warfare Systems Command

Subjects:

Antisubmarine warfare (ASW)
Disestablishment of NAVMAT
Establishment of SPAWAR
Naval Electronic Systems Command
Office of the Chief of Naval Operations
Office of the Chief of Naval Research

Research and development centers
Technical directors
University laboratories
Warfare systems architecture and engineering



DR. ALAN A. BERMAN (LEFT) FORMER TECHNICAL DIRECTOR, AND
CAPTAIN EDWARD E. HENIFIN, FORMER COMMANDING OFFICER OF
THE NAVAL RESEARCH LABORATORY

BESHANY, VADM PHILIP A.

Interviewer: Paul Stillwell

Date of Interview: December 1977, January 1979

Documentation: 505 page transcript, index

Abstract: VADM Beshany discusses his command of Submarine Squadron 4 in the early 1960's during the transition from diesel to nuclear powered submarines, *THRESHER*, and ground work involved in setting up bases for Polaris submarines in Rota, Spain. Director of Submarine Warfare during the development phases of the the LOS ANGELES class attack submarine, first Deputy Chief of Naval Operations (Submarine Warfare).

Repositories: USNI, USNA, NWCM, NHC

Individuals Mentioned:

Rickover, ADM Hyman
Zumwalt, ADM Elmo

Institutions:

Deputy Chief of Naval Operations (Submarine Warfare)

Subjects:

Deputy Chief of Naval Operations (Submarine Warfare)
Nuclear propulsion
Nuclear submarines

Other Entries:

Polaris submarines
USS LOS ANGELES
USS THRESHER

BIRCH, DR. A. FRANCIS

Interviewer: Albert B. Christman

Date of Interview: February 17, 1971

Documentation: 31 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Birch describes his association with Parsons as head of Group 01, an Ordnance liaison in the Manhattan Project. He discusses Parsons' role as administrator and gunnery expert. Birch talks about the tests at Muroc and Tinian and the Hiroshima flight. He comments on his contacts with Parsons after the war.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Bainbridge, Dr. Kenneth Tompkins
Parsons, RADM William S.

Subjects:

Parsons, RADM William S.

Other Entries:

Manhattan Project

BIRKS, LAVERNE S.

Interviewer: Nicole Sanderson

Date of Interview: August 9, 1988

Documentation: Tapes, 15 page transcript

Abstract: Mr. Birks discusses his education and his employment at NRL, where he held various positions of increasing responsibility, including that of head of the X-ray Optics Branch. He engaged in original scientific research in such areas as x-ray diffraction, electron microscopy, x-ray properties of materials, radiation, defect structure in crystals and small angle scattering analysis among others, and he speaks of his professional association with Drs. E. O. Hulburt and Herbert Friedman.

Repositories: NRL

Individuals Mentioned:

Berman, Dr. Alan
Brooks, Edward J.
Brown, Dennis
Criss, John
Friedman, Dr. Herbert
Gilfrich, John
Hulburt, Dr. Edward O.

Kaiser, Herman F.
Nagel, Dr. David
Sandelin, Judy
Sanderson, Dr. John A.
Seal, Roger
Seiler, Karl

Institutions:

American Physical Society
American Society for Testing of
Materials
Atomic Energy Commission
Bureau of Standards
Defense Nuclear Agency
Environmental Protection Agency
International Crystallographic
Association

International Union of Pure and Applied
Chemistry
Naval Research Laboratory
Society for Applied Spectroscopy
University of Illinois
University of Maryland
X-ray Optics Branch (NRL)

Subjects:

Assistant Secretary of Defense for
Research
Atomic bomb
Electron microscope
Electron probe microanalyzer
Geiger counter diffractometer
Hydrogen bomb

Meeting of theory and experiment
Properties of defective crystals
Radiation
X-ray diffraction
X-ray fluorescence
X-ray properties of materials

Other Entries:

Electron microprobe
Nobium steel

Nuclear weapons
X-ray fluorescent spectrometer

BISHOP, CAPT CHARLES

Interviewer: Dr. Mark Jacobsen

Date of Interview: October 1987

Documentation: 2 tapes, 33 page transcript

Abstract: CAPT Charles Bishop discusses his working relationship with Bill McLean in San Diego. He discusses McLean's interests in undersea weapons, administration of the San Diego laboratory, and interaction with Washington sponsors. Bishop discusses funding, particularly differences between BUORD and BUSHIPS. He describes a gradual shift of the laboratories from research, exploratory development, and applied research to program management, systems engineering, and contract management. He also discusses the effects of centralization under McNamara.

Repositories: NOSC

Individuals Mentioned:

Coons, Brad
Frusch, Bob
Goodfellow, RADM Scott
Lang, Thomas G.
Lawson, Dave

McLean, Dr. William B.
McNamara, Robert S.
Morris, Bob
Schenck, Harry
Senter, Frank

Institutions:

Bureau of Ordnance
Bureau of Ships
Naval Undersea Warfare Center

Subjects:

Funding
Laboratory organization
Mansfield Amendment
Marine mammal research
McLean, Dr. William B.

Sound surveillance system
Surveillance towed array sensor system
(SURTASS)
Undersea weapons funding

BLACK, CAPT ROBERT G.

Interviewer: Roger Kempler

Date of Interview: June 21, 1982

Documentation: 24 page transcript, index

Abstract: CAPT Black talks about his initial exposure to Naval research, his assignment as Director of the Personnel Research Division of BUPERS, and the organization of Navy personnel research. He examines the research emphasis at NPRDC, Navy attitudes toward personnel research, and CAPT Black's

philosophy on the subject. Black describes his major contributions to the Navy Personnel Research Program, changing the physical location of Pers-A3, and officer-civilian relationships in BUPERS.

Repositories: DTRC, NPRDC

Individuals Mentioned:

Price, D. George
Sjoholm, Dr. Allan A.

Institutions:

Bureau of Naval Personnel
Naval Research Advisory Committee
Navy Personnel Research and Development Center

Other Entries:

Personnel research

BLOOD, DR. HOWARD

Interviewer: Albert B. Christman

Date of Interview: March 10, 1978

Documentation: 16 page transcript

Abstract: Dr. Blood talks about the merger which created the Naval Ocean Systems Center (NOSC) and the management problems involved. He discusses the purpose of NOSC and evaluates its products.

Repositories: DTRC

Institutions:

Naval Ocean Systems Center
Naval Undersea Center

Subjects:

Laboratory consolidations
Naval Ocean Systems Center

BLOUIN, ROBERT

Interviewer: Dr. Joseph Marchese

Date of Interview: August 1, 1989

Documentation: 2 tapes, 24 page transcript, index

Abstract: In this interview Mr. Blouin discusses his work relative to the MK 48 torpedo program. He describes at length his document "Lessons Learned in the MK 48 Program," which focuses on the problems with what was then the new concept of "fixed price contracting." Elaborating on the government and contractor roles in the program, Mr. Blouin finds five fundamental shortcomings in the fixed price approach. He states that the method of

development, which started with the smallest management possible and added on as problems arose, should be reversed. Finally, he asserts that there existed no mechanism by which to test periodically the contractor's effectiveness. Mr. Blouin next provides information concerning the MK 48 program interaction between the Navy, Penn State University, and Westinghouse, Inc. An assessment of two research teams at the Penn State Laboratory--one in the early to mid 1960s and one in the late 1960s--follows. Mr. Blouin offers an opinion on the necessary elements of a successful complex development program, and then explains his preference for cost-plus contracting rather than fixed price contracting. The interview concludes with an evaluation of the changes in research and development centers in the last decades.

Repositories: DTRC

Individuals mentioned:

Finlon, Francis	Metzel, CAPT Jeffrey
Frosch, Dr. Robert A.	Upshaw, CDR Donald
Greenlaw, William	

Institutions:

Applied Research Laboratory/Penn State	Naval Sea Systems Command
Bureau of Naval Weapons	Naval Underwater Systems Center
Bureau of Ordnance	Naval Weapons Center
Clevite (Gould) Corporation	Research and development centers
Naval Air Development Center	Westinghouse Corporation

Subjects:

Cost type contracting	Legal/contractual disputes
Department of Defense regulation A-109	MK 48 torpedo
Engineering development	performance specifications
EX-10 Program	Technology base work
Fixed-price contracting	Technical management

BODENBURG, JOHN

Interviewer: Elizabeth Babcock

Date of Interview: December 30, 1980

Documentation: 67 page transcript, index

Abstract: Mr. Bodenburg describes his background, his early work at NWC, and discusses the danger of bureaucratization at a Navy lab. He comments on NWC top management's concern for communication, morale, and productivity and the relationship between the Commander and the Technical Director. Bodenburg notes a decline in the amount of innovative research and talks about the advantages of having a Rear Admiral as commander of NWC. He also states that the research end of RDT&E is a low cost, high yield field. Bodenburg explains the changing nature of Naval warfare and the political nature of weapons development. He comments on problems with the new SES system in high management, NWC's relations with Washington, and the spirit of cooperation among the labs.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Freeman, RADM Rowland G., III
Harris, RADM William L.

Hillyer, Robert
White, ADM Alfred J., Jr.

Institutions:

Naval Weapons Center

Other Entries:

Laboratory management
Research, development, test and
evaluation (RDT&E)
Senior Executive Service

Technical directors
Weapons development

BODENSTEINER, RADM WAYNE

Interviewer: Dr. Joseph Marchese

Date of Interview: March 12, 1990

Documentation: 1 tape, 14 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. VADM Bodensteiner initially provides a history of NAVMAT's Antisubmarine Warfare (ASW) Systems Program Office, PM-4, in the 1980s as well as insight into the changing scenario for NAVMAT. He also details the rationale behind the diminishing need for the existence of PM-4 and also the reasons for the reorganization of NAVMAT. VADM Bodensteiner elaborates on the planned reorganization of the Office of the Deputy Chief of Naval Material for Acquisitions, MAT-08, as well as the sudden disestablishment of NAVMAT. He also discusses the speculation surrounding ADM White's precipitous retirement as Chief of Naval Material and concludes by detailing the rationales behind placing the warfare systems architecture and engineering function in SPAWAR.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
Baggett, VADM Lee
Bulkeley, VADM John
Clark, VADM Glenwood
Fowler, VADM Earl
Hatcher, CAPT Ross
Hays, ADM Ronald

Hogg, ADM James
Lehman, John
Miller, VADM Richard
Schick, RADM George
Waller, VADM Edward
White, ADM Steven
Wilkinson, VADM Joseph, Jr.

Institutions:

Board of Inspection and Survey
Department of Defense
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Center
Naval Sea Systems Command

Naval Surface Weapons Center
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command
University of Texas

Subjects:

Advanced air-to-air missile
Advanced air-to-surface missile
Advanced surface missile
Advanced surface-to-surface missile
Antiair warfare
Antisubmarine warfare (ASW)
Antisurface warfare

Disestablishment of NAVMAT
Electromagnetic interference
Electronic warfare
Establishment of SPAWAR
Research and development centers
Warfare systems architecture and engineering

BOLT, DR. RICHARD HENRY

Interviewer: Richard D. Glasow

Date of Interview: August 21, 1980

Documentation: Tapes, transcript

Abstract: Dr. Bolt describes his background and education, his work with the OSRD and his research in acoustics.

Repositories: NUM

Individuals Mentioned:

Knudson, Dr. Vern
Meyer, Irwin

Institutions:

National Defense Research Committee
Office of Scientific Research and Development
University of California

Other Entries:

Acoustics research

BOWEN, DR. EDWARD G.

Interviewer: Dr. David K. Allison

Date of Interview: March 16, 1979

Documentation: 4 tapes, index

Abstract: Dr. Bowen discusses radar development in England in the 1930's, radar as a source of cooperation and conflict between the United States and England, the development of radar, and radar technology during World War II.

Repositories: NRL

Subjects:

Radar research

Other Entries:
Tizard Mission

BOWEN, GILBERT C.

Interviewer: Glenn E. Bugos

Date of Interview: July 17, 1985

Documentation: 26 page transcript

Abstract: Bowen recalls the creation of the Vietnam Laboratory Assistance Program (VLAP), and his activities as deputy coordinator and later coordinator. The interview concentrates on the operations of VLAP, how it got things done quickly, how it maintained contact with "the field," kept up with changing requirements and got along with the SYSCOMs, other laboratories and the Director of Navy Laboratories. Bowen discusses various VLAP projects in support of SEAL Teams, Marines, and the VLAP-Army program, and relations with NRDU-V and the Provost Committee. Bowen also describes how the Navy Science Assistance Program was created to fill the VLAP role in peacetime, and his experiences as its director.

Repositories: DTRC

Institutions:

Military Assistance Command-Vietnam
Navy Ordnance Laboratory
Navy Research and Development Unit-Vietnam

Provost Committee
Systems Commands
Vietnam Laboratory Assistance Program

Subjects:

"Centers of Excellence"
Communications
Director of Navy Laboratories
Funding
Laboratory Vietnam Digest
Military needs

Navy Science Assistance Program
On-site expertise
Project management
Systems commands
Systems development

BOWEN, VADM HAROLD G.

Interviewer: Dr. Peter Burton and CAPT Robert L. Hansen

Date of Interview: 1974

Documentation: 45 page transcript, index

Abstract: VADM Bowen talks about the Navy planning system for R&D from 1945 through 1958, the DCNO (Dev)'s responsibilities, and the Development Characteristics instituted in 1953. In the post-1958 era, Bowen discusses the DCNO (Dev)'s evaluation of the TDP, OPNAV's size and consequent inefficiency, and ASN (R&D)'s responsibility for RDT&E appropriations. He describes DDR&E interference in some programs, the DCNO (Dev)'s relationship with Congressional Armed Services Committees, and the Navy's exclusion from the space program. Bowen notes that the creation of the DNL was seen as an

additional act of centralization and that labs want more independent R&D authority. He also talks about the difficulty of recruiting good personnel because of competition from industry.

Repositories: NHC, DTRC

Individuals Mentioned:

Frosch, Dr. Robert A.
Martell, VADM Charles B.
McNamara, Robert S.

Institutions:

Office of Assistant Secretary of the
Navy (Research and Development)
Office of Deputy Chief of Naval
Operations (Development)

Office of Director of Navy Laboratories
Office of Secretary of Defense

Subjects:

Deputy Chief of Naval Operations
Director of Defense Research and
Engineering
Director of Navy Laboratories

Laboratory management
Office of the Chief of Naval Operations
Research, development, test, and
evaluation (RDT&E)

BOWEN, HAROLD G., JR.

Interviewer: Dr. David K. Allison

Date of Interview: April 23, 1979

Documentation: 1 tape, index

Abstract: This interview concerns the career and activities of VADM Harold G. Bowen, Sr.

Repositories: NRL

Individuals Mentioned:

Bowen, VADM Harold G.

BOWEN, DR. IRA S.

Interviewer: Albert B. Christman

Date of Interview: October 5, 1970

Documentation: 33 page transcript, index

Abstract: Dr. Bowen describes his involvement in the rocket program at CalTech, the choice of China Lake, CA, for NOTS, and the first tests at NOTS. He talks about Dr. Charles C. Lauritsen, Dr. Emory Ellis, and Dr. Robert A. Millikan, and comments on his own involvement in the war effort. Bowen details his military contacts at China Lake and recalls the accidents at Eaton Canyon and Kellogg. He also mentions the tests at Goldstone Lake.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Ellis, Dr. Emory L.
Fowler, Dr. William

Lauritsen, Dr. Charles C.
Millikan, Dr. Robert A.

Subjects:

Naval Ordnance Test Station
Rocket research

BOWEN, JAMES

Interviewer: Elizabeth Babcock

Date of Interview: December 2, 1990

Documentation: 3 tapes, 71 page transcript, index

Abstract: This interview is concerned with various programs Mr. Bowen was involved in at NWC. Among those many programs are the following: the continuous-rod warhead, the BOAR rocket, numerous underwater projects, Project Hindsight, Satellite programs, hovering rocket systems, Project Pogo Stick, fuel-air explosives, the Aerial Target Program, and fluid injection. Mr. Bowen also discusses the training of new program managers, NWC's dealings with Washington, and the significance of the Naval Ocean Testing Center's underwater projects.

Repositories: NWC, DTRC

Individuals Mentioned:

Aley, Mike
Dake, James
Dettling, Ron
Doig, Leroy L., Jr.
Friedlander, Frank
Fulton, Frank
Hays, Burrell W.
Kistler, Dr. Richard E.
Lucas, Richard
McCullough, Foy

McLean, Dr. William B.
Morefield, George
Regelson, Lillian
Riggs, Leroy
Rutkowski, Gene
Smith, Dr. Lloyd
Sullivan, Shelby
Wilcox, Douglas J.
Wilson, Dr. Haskell G.

Institutions:

Argonne National Laboratory
Bureau of Ships
David Taylor Model Basin
Defense Nuclear Agency
International Business Machines
Lockheed Missile and Space Company

Naval Ocean Systems Center
Naval Ordnance Laboratory
Naval Propellant Plant
Naval Weapons Center
Underwater Ordnance Department
Westinghouse Corporation

Subjects:

Aerial target program
Bombardment Aircraft Rocket (BOAR)
Free-air detonation
Fuel-air explosives programs
Project Hindsight

Project Pogo
Rocket systems
Shell-molding process
Underwater programs
Vietnam War

BOWEN, JAMES

Interviewer: Elizabeth Babcock

Date of Interview: April 14, 1989

Documentation: 89 page transcript, index

Abstract: Mr. Bowen looks back on a distinguished and adventure-filled career that spanned more than 30 years at the Naval Weapons Center and its predecessor organization, the Naval Ordnance Test Station (NOTS). He discusses accomplishments, politics, and anecdotes of the fuel-air explosive (FAE) program, the Moray program, and the full-scale aerial target (FSAT) program. He recounts colorful stories on such subjects as his work as a civilian diver for NOTS underwater projects, his hair-raising demonstration of Project Pogo (a one-man helicopter), his adventures getting photographic coverage of FAE in Southeast Asia, and his work on studies such as Project Hindsight and NOTS' first Five-Year Plan. He also offers insights into the management insights and technical interests of Dr. William B. McLean.

Repositories: NWC

Individuals Mentioned:

Doig, Leroy L., Jr.
McLean, Dr. William B.
Zabel, Larry

Institutions:

Defense Nuclear Agency
Naval Ordnance Test Station
Naval Weapons Center

Other Entries:

Antisubmarine warfare (ASW)
Drones
Fuel-air explosives (FAE)
Full-scale aerial targets
McLean, Dr. William B.

Moray
Polaris
Project Hindsight
Project Pogo

BOWYER, DR. C. STEWART

Interviewer: Richard F. Hirsch

Date of Interview: July 28, 1978

Documentation: 2 tapes, notes

Abstract: Dr. Bowyer, an NRL space scientist, was interviewed by Richard Hirsh for part of a doctoral dissertation on the beginnings of x-ray astronomy. These tapes were prepared in conjunction with the National Air and Space Museum (NASM) and the American Institute of Physics (AIP).

Repositories: NRL, NASM

Institutions:

American Institute of Physics
Lawrence Livermore Laboratory
Lockheed Corporation

National Aeronautics and Space
Administration
National Air and Space Museum
Naval Research Laboratory

Subjects:

Astronomy
X-ray astronomy

Other Entries:

Black holes
Neutron stars

BOYLE, JOHN

Interviewer: Elizabeth Babcock

Date of Interview: August 31, 1989

Documentation: 98 page transcript, index

Abstract: Mr. Boyle discusses his work on a variety of "distinguished failures" at the Naval Ordnance Test Station (later the Naval Weapons Center) during the period 1951-1973. These projects include SWAB (the shallow-water attack boat), the Raywinder missile, and the Loudmouth public-address system, proposed for broadcasting information in the jungles of Southeast Asia. He briefly discusses his 1973 through 1983 work at the NSWC, Dahlgren, involving small boat projects and radar signature reduction. He also gives several interesting anecdotes on the management styles in China Lake's old Aviation Ordnance Department, and he discourses at length on his philosophy relative to carrier warfare in today's Navy.

Repositories: NWC

Individuals Mentioned:

Amlie, Dr. Thomas S.
Bernard, Charles W.
Bernard, Ralph
Colvard, Dr. James

Hays, Burrell W.
McLean, Dr. William B.
Ward, Dr. Newton E.

Institutions:

Naval Ordnance Test Station
Naval Surface Weapons Center
Naval Weapons Center

Subjects:

Carrier warfare
Naval Ordnance Test Station
Naval strategy

Radar signature reduction
Raywinder
Shallow-water attack boat

BRADBURY, DR. NORRIS E.

Interviewer: Albert B. Christman

Date of Interview: January 23, 1967

Documentation: Index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Bradbury recalls that at the Naval Proving Ground (NPG)-Dahlgren, Parsons stimulated people in their work and was able to work well with people of various backgrounds. At the Manhattan Project-Los Alamos, Parsons contributed "common sense" and was probably second in command. He and Oppenheimer were natural compliments. Bradbury also comments on Parsons after the war and, in a general way, on NOTS and the Salt Wells Pilot Plant.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Oppenheimer, Dr. Robert
Parsons, RADM William S.

Institutions:

Naval Proving Ground

Subjects:

Manhattan Project
Parsons, RADM William S.
Salt Wells pilot plant

BRAMBLE, DR. CHARLES C.

Interviewer: Albert B. Christman

Date of Interview: May 1969

Documentation: 59 page transcript

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Bramble talks about Parsons as a post-graduate student and instructor at the Naval Academy in Annapolis, MD. He describes Parsons' personal characteristics and his role in the Sidewinder, Composition, and Manhattan Projects. Bramble also comments on Parsons' death.

Repositories: NWC, DTRC

Individuals Mentioned:

Parsons, RADM William S.

Institutions:

Naval Proving Ground
U.S. Naval Academy

Subjects:

Composition Project
Manhattan Project
Parsons, RADM William S.
Sidewinder Missile Project

BRAMBLE, DR. CHARLES C.

Interviewer: Cynthia Rouse

Date of Interview: January 31, 1977

Documentation: 6 page transcript

Abstract: This interview is Chapter VI of Dahlgren, edited by Kenneth G. McCollum. Dr. Bramble relates his first experiences at Dahlgren, as an instructor at the Naval Postgraduate School, his work at Dahlgren in World War II, Dr. L. T. E. Thompson, Nils Riffolt, the Aiken Relay Calculator, Naval Ordnance Research Calculator (NORC), and the MARK I through MARK III calculators.

Repositories: NSWC, DTRC

Individuals Mentioned:

Riffolt, Nils
Thompson, Dr. Louis T. E.

Institutions:

Naval Postgraduate School
Naval Proving Ground

Subjects:

Computers
Fire control computers
Ordnance

Other Entries:

Aiken Relay Calculator
Naval Ordnance Research Calculator

BRAUN, RADM BOYNTON L.

Interviewer: Jack Brooks, Jr.

Date of Interview: May 9, 1975

Documentation: 23 page transcript

Abstract: This interview is Chapter III in Dahlgren, edited by Kenneth G. McCollum. RADM Braun describes his education and his early experiences in bombing and fire control, aerial bombing, the Norden bombsight, Dahlgren in the 1920s and 1930s, and testing procedures.

Repositories: NSWC, DTRC

Individuals Mentioned:

Furlong, RADM William Rea
King, FADM Ernest
Leary, VADM Herbert F.

Schuyler, RADM Garret Lansing
Thompson, Dr. Louis T. E.

Institutions:

Naval Proving Ground

Subjects:

Fire control
Naval aviation
Ordnance

Other Entries:

Aerial bombing
Norden Bombsight

BRESLOW, ARTHUR

Interviewer: Albert B. Christman

Date of Interview: October 1966

Documentation: 68 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mr. Breslow describes the B-29 tests at Muroc, including problems with the types of bombs to be loaded and training the crews. He also describes his work on the Manhattan Project in particular, the day-to-day operations of the base at Los Alamos and the atom bomb test Trinity.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Kistiakowsky, Dr. George B.
Parsons, RADM William S.

Ramsey, Dr. Norman
Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station

Subjects:

B-29 bomber
Fat Man bomb
Manhattan Project

Parsons, RADM William S.
Thin Man bomb
Trinity Test

BRODE, DR. WALLACE

Interviewer: Albert B. Christman

Date of Interview: May 1969

Documentation: 35 page transcript, index

Abstract: Dr. Brode discusses military-civilian relationships at Navy labs, how he came to NOTS, and his job there. He comments on discrimination problems between officers and civilians, the need for scientists to have a voice in the Navy, and the lack of contact with other scientists outside the labs. Brode also details Forrestal's visit to NOTS, his philosophy toward operating a lab, and the operation of NOTS.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Bush, Dr. Vannevar

Forrestal, James

Hussey, VADM George F.

Sykes, RADM James B.

Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station

Subjects:

Laboratory management

Military-civilian relationships

BROOKS, DR. HARVEY

Interviewer: Richard D. Glasow

Date of Interview: August 20, 1980

Documentation: Tapes, transcript

Abstract: Dr. Brooks describes his background and education, and his work with the Harvard Underwater Sound Laboratory.

Repositories: NUM

Individuals Mentioned:

Hickman, Roger

Hunt, Ted

Institutions:

Harvard University/Underwater Sound Laboratory

National Defense Research Committee

Subjects:

Harvard University Underwater Sound Laboratory

Solid state physics

Sonar

Other Entries:
Acoustics research
Ordnance research

BRYAN, DR. GLENN L.

Interviewer: Roger Kempler

Date of Interview: July 29, 1982

Documentation: 23 page transcript

Abstract: Dr. Bryan discusses the evolution of personnel research in the Navy, beginning with the 1960s, the relationship between that research and the Navy's objectives, and trends in Navy R&D in the 1960s and 1970s. Bryan also describes the creation and activities of NPRDC, its realignment under NAVMAT, and the role of NPRDC as a "Center of Excellence" for the coordination of human resources R&D. In closing, Dr. Bryan reflects on the center's major accomplishments and future challenges.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Clarkin, CAPT James J.
Collins, Dr. John

Rigney, Dr. Joseph
Wallace, Dr. Raines

Institutions:

Bureau of Naval Personnel
Naval Material Command
Naval Research Advisory Committee

Navy Personnel Research and Development
Center
Office of the Chief of Naval Operations
Office of the Secretary of the Navy

Other Entries:

Laboratory management
Laboratory organization

Personnel research
Research and development

BUMP, RADM STANLEY

Interviewer: Dr. Joseph Marchese

Date of Interview: March 7, 1990

Documentation: 1 tape, 18 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. After discussing the reasons for these changes, RADM Bump explains why the management of research and development was shifted from the Chief of Naval Material to the Chief of Naval Research. He then discusses the rationale behind both the placement of warfare architecture and engineering functions within SPAWAR, and the establishment of the Office of Naval Acquisition Support.

Repositories: DTRC

Individuals Mentioned:

Bodensteiner, RADM Wayne
Colvard, Dr. James
DiMascio, Dr. A. J.
Hays, ADM Ronald

Lehman, John
Miller, VADM Richard
Mooney, RADM John Bradford
White, ADM Steven

Institutions:

Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Sea Systems Command

Naval Supply Systems Command
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command

Subjects:

Command control, communication, and
intelligence
Disestablishment of NAVMAT
Establishment of SPAWAR
Management, horizontal and vertical

Research and development centers
Underwater surveillance
Warfare systems architecture and
engineering

BURKE, ADM ARLEIGH A.

Interviewer: Unknown

Date of Interview: September 1972

Documentation: 36 page transcript

Abstract: ADM Burke served as Chief of Naval Operations during the development of the Polaris weapons system. This is one part of a series of seven interviews on concept and development of the Polaris program conducted by the U.S. Naval Institute.

Repositories: NHC, NWCM, USNA, USNI

Institutions:

Chief of Naval Operations

Subjects:

Ballistic missile submarines
Fleet ballistic missiles
Nuclear missiles

Nuclear powered fleet ballistic
missile submarines
Submarine launched ballistic missiles
Weapons systems

Other Entries:

Polaris program

BURNS, DR. ROBERT O.

Interviewer: Booz, Allen & Hamilton

Date of Interview: October 11, 1974

Documentation: 2 tapes

Abstract: Dr. Burns was Development Director in the Office of Naval Research and then Chief Scientist in the Office of the Chief of Naval Operations (OP-98T), and discusses the organization of Navy R&D from both perspectives. Burns concentrates on the various attempts made within the Navy to organize the planning of weapons system acquisition, from 1946 to 1968. He discusses the inception and use of research requirements, development characteristics, concept formulation/contract definition, technical development plans and how each succeeded or failed in controlling Naval research. Burns details the conflicts between the laboratories, OPNAV, and ONR over the control of research and research funding. The findings of various boards and studies of naval research are discussed, as is the impact of the various review councils in OPNAV, and the offices of the Secretaries of the Navy and of Defense. In the last half hour of the interview, Dr. Burns discusses the current organization of the Navy and how it could be improved, and the various changes in research position funding and personnel management that occurred after 1948.

Repositories: DTRC

Institutions:

Defense Science Board
Defense Systems Acquisitions Review
Council
Director of Defense Research and
Engineering
Joint Research and Development Board

National Science Foundation
Navy bureaus
Navy Electronic Laboratory
Office of Naval Research
Office of the Chief of Naval Operations
Systems commands

Subjects:

Civil service reforms
Contracting
Development characteristics
Dillon Board
Evaluation of research
Exploratory development
Franke Board
Funding
Gates Commission

Integrated systems approach
Libby Board
Management of research
Mansfield Amendment
Personnel management
Planning objectives
Systems development
Technical Development Plan
Weapons concepts

BURROUGHS, KAY (MRS. SHERMAN E.)

Interviewer: John D. Gerrard-Gough

Date of Interview: November 1, 1972

Documentation: 19 page transcript, index

Abstract: Mrs. Burroughs explains how she met her husband, the future ADM Burroughs. She comments on the early days of NOTS, social life there, and the men who worked around her husband. She comments on CAPT Duncan, Emory Ellis, and CDR John Richmond.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Duncan, CAPT James

Ellis, Dr. Emory L.
Richmond, CDR John

Institutions:

Naval Ordnance Test Station

Subjects:

Burroughs, RADM Sherman E.
Naval Ordnance Test Station

BURROUGHS, MRS. ROBERT (FORMER MRS. WILLIAM S. PARSONS)

Interviewer: Albert B. Christman

Date of Interview: April 21, 1966

Documentation: 154 page transcript, index.

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mrs. Burroughs discusses Parsons' family life, personal characteristics, and decision to enter the Navy. She describes the rapport between Parsons and Dr. L. T. E. Thompson when both were at NPG and Parsons' peculiar ability (for a Navy man) to understand and communicate with scientists. Other sections cover Parsons' understanding and communication with scientists, his work with radar, the proximity fuze, and the atomic bomb, and his relationship with Dr. Robert Oppenheimer. Mrs. Burroughs also relays Parsons' opinion on postwar R&D.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Ashworth, VADM Frederick L.
Fuller, Clarissa Parsons
Groves, LTG Leslie
Oppenheimer, Dr. Robert

Parsons, Mrs. William S.
Parsons, RADM William S.
Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station
Naval Research Laboratory

Subjects:

Atomic research
Parsons, RADM William S.
Radar research

Other Entries:

Manhattan Project
Proximity fuze project
Sidewinder missile project

BURROUGHS, RADM SHERMAN E.

Interviewer: Albert B. Christman

Date of Interview: April 1966

Documentation: 22 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. RADM Burroughs discusses the origin of NOTS, its connections with CalTech, and the choice of its location. He reminisces on his work with Dr. L. T. E. Thompson and RADM Parsons and talks about Parsons' work on the Manhattan Project and the Proximity Fuze.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Hussey, VADM George F.

Lauritsen, Dr. Charles C.

Parsons, RADM William S.

Thompson, Dr. Louis T. E.

Institutions:

California Institute of Technology

Naval Ordnance Test Station

Naval Proving Ground

Subjects:

Manhattan Project

Naval Ordnance Test Station

Parsons, RADM William S.

Proximity fuze

BURROUGHS, RADM SHERMAN E.

Interviewer: Albert B. Christman

Date of Interview: November 4, 1966

Documentation: 51 page transcript, index.

Abstract: RADM Burroughs talks about his early career in aviation ordnance, and his time as a member of VADM Hussey's staff. Next, he discusses the idea of NOTS as a permanent R&D facility. He describes the relationship between military men, engineers, and scientists at NOTS and profiles the first group of officers stationed at NOTS.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Blandy, ADM George

Byrnes, CAPT James

Duncan, CAPT James

Halsey, ADM William F.

Hayward, ADM John T.

Lauritsen, Dr. Charles C.

Moses, William

Richmond, CDR John

Schoeffel, RADM Malcom F.

Institutions:

Naval Ordnance Test Station

Subjects:
Aviation ordnance
Naval aviation
Naval Ordnance Test Station

BURROUGHS, RADM SHERMAN E.
CHRISTMAN, ALBERT B.
ELLIS, DR. EMORY L.
ROBINSON, K. H.
RUMPP, NORMAN L.
THOMPSON, DR. LOUIS T. E.
WATSON, DR. EARNEST C.

Interviewer: Albert B. Christman, Norman L. Rumpp, and K. H. Robinson

Date of Interview: May 17, 1968

Documentation: 52 page transcript, index

Abstract: This is a group discussion of early NOTS history in both the World War II and post-World War II periods. Among the topics discussed are wartime research, the building of NOTS, and rocket research.

Repositories. NWC, DTRC, NHC

Individuals Mentioned:
Lauritsen, Dr. Charles C.

Institutions:
Naval Ordnance Test Station
Naval Proving Ground

Subjects:
Naval Ordnance Test Station
Rocket research

BURROUGHS, RADM SHERMAN E.
HAYWARD, ADM JOHN T.

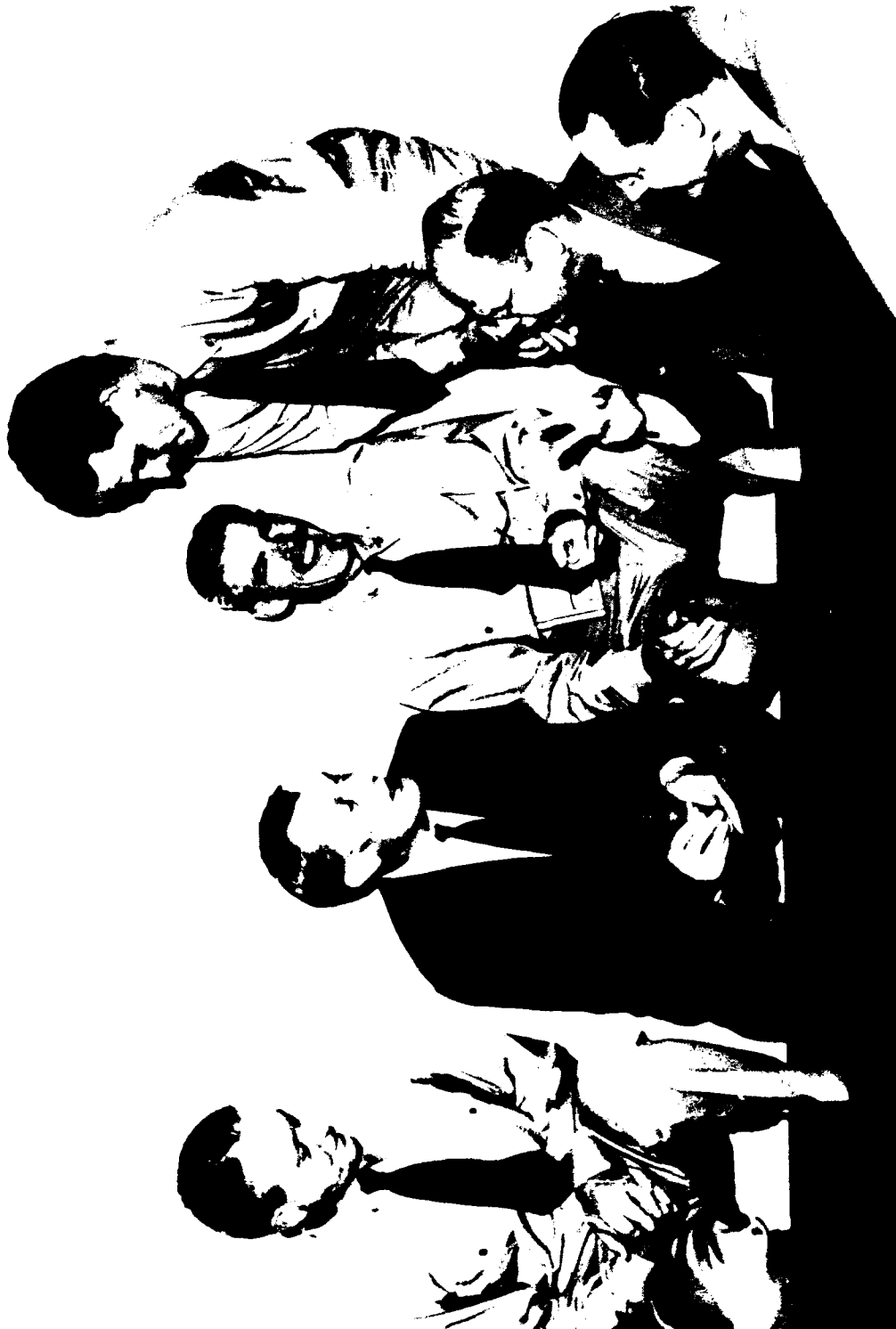
"Twenty-Fifth Anniversary Dinner (NOTS/NWC) Speeches"

Date of Interview: November 9, 1968

Documentation: 25 page transcript, index

Abstract: RADM Burroughs reminisces on some of the major figures in the history of NOTS/NWC. VADM Hayward talks about nonconformists in Naval history and their contributions.

Repositories: NWC, DTRC, NHC



THE NAVAL ORDNANCE TEST STATION - CALIFORNIA INSTITUTE OF TECHNOLOGY TEAM, 1 AUGUST 1945
LEFT TO RIGHT: COMMANDER JOHN O. RICHMOND, DR. CHARLES C. LAURITSEN,
CAPTAIN SHERMAN E. BURROUGHS, JR., COMMANDER JOHN T. HAYWARD,
DR. WILLIAM A. FOWLER AND DR. EMORY L. ELLIS

Individuals Mentioned:

Thompson, Dr. Louis T. E.

Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station

Naval Weapons Center

Subjects:

Naval Ordnance Test Station

Naval Weapons Center

BUSEY, ADM JAMES

Interviewer: Dr. Joseph Marchese

Date of Interview: April 20, 1990

Documentation: 2 tapes, 38 page transcript, index

Abstract: This interview is one of a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Busey discusses the effectiveness of NAVELEX, predecessor to SPAWAR, as well as efforts at systems integration in both NAVMAT and NAVELEX. Other topics discussed include SPAWAR's roles with WSA&E and antisubmarine warfare (ASW) as well as its relationship with the naval bureaucracy. ADM Busey also examines the lack of adequate funding and authority given to SPAWAR to carry out its mission. ADM Busey reviews the transfer of the Navy's R&D centers to SPAWAR and the transfer of many programs out of SPAWAR before commenting upon the relationships of the Director of Navy Laboratories and the R&D centers to SPAWAR. He also gives a concise evaluation of the activities and effectiveness of SPAWAR at the time of his stepping down as Vice Chief of Naval Operations and his perceptions of SPAWAR's structure in the years since he retired from the Navy.

Repositories: DTRC



ADMIRAL JAMES BUSEY
COMMANDER OF THE NAVAL AIR SYSTEMS COMMAND, JULY 1983 THROUGH AUGUST 1985;
VICE CHIEF OF NAVAL OPERATIONS, SEPTEMBER 1985 THROUGH MARCH 1987

Individuals Mentioned:

Arnold, RADM Henry
Baciocco, VADM Albert
Baggett, VADM Lee
Ball, William
Berman, Dr. Alan
Bodensteiner, RADM Wayne
Clark, VADM Glenwood
Colvard, Dr. James
Dimascio, Dr. A. J.
Dorman, RADM Craig
Edney, ADM Leon
Fowler, VADM Earl
Hardistey, ADM Huntington
Hays, ADM Ronald
Hillyer, Robert
Hogg, ADM James
Hunt, William
Jeremiah, ADM David
Johnson, Dr. Robert S..
Josephson, ADM Joseph
Langston, CDR Marvin
Latham, Dr. Donald
Lehman, John
McCarthy, VADM Paul, Jr.

Metcalf, ADM Joseph
Meyer, RADM Wayne
Miller, VADM Richard
Middendorf, J. William, III
Mooney, RADM John Bradford
Morton, Gary
Paisley, Melvyn
Pittenger, RADM Richard
Pyatt, Everett
Reed, Jerry
Rice, RADM Joseph
Rowden, VADM William
Rowe, ADM Arthur
Rumpf, Richard
Vogt, RADM Larry
Waller, VADM Edward
Watkins, ADM James
Weaver, RADM John
Webb, James
White, ADM Steven
Whittle, ADM Alfred J., Jr.
Wilkinson, VADM Joseph, Jr.
Witter, RADM Raymond
Wolkensdorfer, RADM Daniel

Institutions:

Booz, Allen, & Hamilton, Inc.
Bureau of Naval Ordnance
Bureau of Naval Personnel
Bureau of Naval Ships
Center for Naval Analyses
Department of Defense
Federal Aviation Administration
Naval Air Development Center
Naval Air Systems Command
Naval Electronic Systems Command
Naval Facilities Engineering Command

Naval Material Command
Naval Ocean Systems Center
Naval Research Laboratory
Naval Sea Systems Command
Naval Supply Systems Command
Naval Weapons Center
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Office of the Chief of Naval Research
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command

Subjects:

AEGIS program
Antisubmarine warfare (ASW)
Command control, communication, and
intelligence
Disestablishment of NAVMAT
Establishment of SPAWAR

Systems integration
Top-level warfare requirements
TRIDENT program
Warfare systems architecture and
engineering

BUSH, DR. VANNEVAR

Interviewer: Albert B. Christman

Date of Interview: January 26, 1971

Documentation: 8 page transcript

Abstract: Dr. Bush discusses his work on the "10th Fleet" with ADM King; submarine detection technology; need for funding and independence by the national scientific organizations; Army-Navy role in A-bomb development and the race with Germany; National Defense Research Committee (NDRC) and Parsons' work on VT fuzes; the formation of NDRC; interference in R&D by the JCS; and the distinction made by the military between scientists and engineers in OSRD.

Repositories: DTRC

Individuals Mentioned:

Groves, LTG Leslie
King, FADM Ernest
Parsons, RADM William S.

Institutions:

Army Corps of Engineers	Tenth Fleet
Naval Research Center	Washington Navy Yard

Subjects:

Research and development
Sonar

Other Entries:

Atomic bomb
Hunter-killer groups
Variable Time (VT) fuzes

BYRNES, CAPT JAMES

Interviewer: A. B. Christman

Date of Interview: May 1967

Documentation: 31 page transcript, index

Abstract: CAPT Brynes discusses the development of NOTS as a response to strengthening the shore establishment to support a two-ocean Navy; locating and securing the NOTS range; flexibility in design of NOTS to accommodate change; the plans for a permanent post-war establishment; NOTS originally envisioned to encompass White Oak efforts; and the names of people involved in early NOTS.

Repositories: DTRC

Individuals Mentioned:

Blandy, ADM George	Parsons, RADM William S.
Burroughs, RADM Sherman E.	Thompson, Dr. Louis T. E.

Institutions:

California Institute of Technology	Naval Ordnance Testing Center
Naval Gun Factory	Naval Weapons Laboratory

Subjects:

Naval Ordnance Test Station

Other Entries:

Salt Wells pilot plant

USS TEXAS

BYRUM, E. T.

Interviewer: Richard Hirsh

Date of Interview: 1976

Documentation: Tapes

Repositories: AIP

CAMP, VICTOR W.

Interviewer: Roger Kempler

Date of Interview: July 7, 1982

Documentation: 23 page transcript, index

Abstract: Mr. Camp discusses the Navy's attitude toward personnel research in the 1940's and 1950's, his association with ADM Rickover's staff, and the Personnel Research Division under the Assistant Chief for Personnel--Plans and Programs. He talks about R&D budgeting under Pers-A3, relations between field activities and agencies in Washington, and the effect of personnel research on systems design. Camp describes the role of John J. Collins in the establishment of NPRDC, his own role in planning NPRDC, and his place in the NPRDC organization. He comments on the change in management from BUPERS to the CNM and the improved quality of Navy Personnel Research.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Collins, Dr. John

Price, D. George

Ramses, Dr. Eugene

Institutions:

Bureau of Naval Personnel

Chief of Naval Material

Navy Personnel Research and Development Center

Subjects:

Personnel research

Research and development funding

CAMPBELL, JAMES

Interviewer: Elizabeth Babcock

Date of Interview: January 25, 1989

Documentation: 35 page transcript, index

Abstract: Mr. Campbell talks about his work in underwater acoustics research at the old Pasadena Annex of NCTS and about the working relationship between the Pasadena Annex and the parent organization at China Lake. He reminisces about the personalities of some of the managers he worked for in Pasadena and provides a description of the "NOTS Fleet," a Long Beach-based collection of barges and torpedo retriever boats used in tests at sea off San Clemente Island. Follow-on programs of the Naval Undersea Research and Development Center (later the Naval Ocean Systems Center) on which Mr. Campbell worked with Dr. William B. McLean involved studies of porpoises and bats.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Lang, Thomas G.

Tickner, A. J.

McLean, Dr. William B.

Wilcox, Douglas J.

Institutions:

Naval Ocean Systems Center

Naval Ordnance Test Station

Naval Undersea Research and Development Center

Other Entries:

Acoustic properties of the sea

Pasadena Annex

Morris Dam testing facilities

Porpoise research

NOTS Fleet

CAMPBELL, JOHN H.

CURCIO, JOSEPH A.

GORBICS, STEVEN

HANSEN, DONALD F.

KRAUSE, DR. ERNST H.

PETTY, CHARLES W.

SANDERSON, DR. JOHN A.

SHULER, MARION P., JR.

STEWART, HAROLD S.

Interviewer: Louis F. Drummeter, Jr.

Date of Interview: 1984

Documentation: 8 tapes

Abstract: Participation by employees of the Naval Research Laboratory in above-ground nuclear testing in the 1950's is the subject of these interviews. Discussion revolves principally around technical aspects of GREENHOUSE and IVY tests and methods by which obstacles were overcome.

Repositories: NRL

Individuals Mentioned:

Bagley, James
Butler, C. P.
Dobey, Clyde
Faust, Dr. William
Hall, Dr. Wayne C.
Hoerlin, Herman
Hulburt, Dr. Edward O.
Lawrence, E. O.

Ogle, William
Richardson, Ralph
Strain, Dr. Charles V.
Teller, Dr. Edward
Van Allen, Roland L.
Wall, George
York, Dr. Herbert

Institutions:

Edgerton, Germeshausen & Grier (EG&G)
Los Alamos Scientific Laboratory
Los Angeles National Laboratory

National Bureau of Standards
Naval Research Laboratory
RAND Corporation

Subjects:

Above-ground nuclear testing
Calibration sources
Fusion rate
Helium absorption
High-resolution spectroscopy

Infrared flux measurements
Reactor design
Spectrographic observations
Thermocouple measurements

Other Entries:

Bikini Atoll
"Cine-spectograph"
Hohlraum experiment
Krause-Ogle box
Meinel spectograph
Nagasaki plutonium bomb

Oscilloscope films
Photoelectric measurements
Rossi "Method"
Schuman-Runge bands
Traveling-wave amplifiers
Vacuum system

CARMONDY, MRS. DAVID

Interviewer: Albert B. Christman

Date of Interview: January 1967

Documentation: 44 page transcript, index

Abstract: Mrs. Carmondy discusses coming to work for ADM Parsons; the perception that he did not receive the credit due him for the Manhattan Project work; her impressions of ADM Parsons as a brilliant, dedicated, fair man; relationships among Parsons, Oppenheimer, and Thompson; and the general demeanor of the man.

Repositories: DTRC

Individuals Mentioned:

Groves, LTG Leslie
Oppenheimer, Dr. Robert
Parsons, RADM William S

Institutions:

Los Alamos Laboratory
Naval Ordnance Laboratory
Vickers Corporation

Subjects:

Parsons, RADM William S.

Other Entries:

Enola Gay
Manhattan Project
Variable Time (VT) fuzes

CAROME, DR. EDWARD F.

Interviewer: Dr. David K. Allison

Date of Interview: August 5, 1980

Documentation: 2 tapes, index

Abstract: NRL pioneered in fiber optics research and has been the Navy's lead laboratory for the tri-service Fiber Optics Sensor System (FOSS) development program. Dr. Carome discusses early experiments at NRL's Schlieren laboratory, coworkers, and initial patents for a optical fiber hydrophone.

Repositories: NRL

Individuals Mentioned:

Berman, Dr. Alan
Davis, Dr. Charles M.

Institutions:

John Carroll University
Naval Research Laboratory
Schlieren Laboratory

Stanford University
Thompson Ramo-Wooldridge Corporation

Subjects:

Fiber optics

Other Entries:

Acoustics research
Fiber optic hydrophone
Fiber optics sensor system

CARSTATER, DR. EUGENE

Interviewer: Roger Kempler

Date of Interview: July 23, 1982

Documentation: 19 page transcript

Abstract: Dr. Carstater discusses his entry into Navy personnel research, and the leadership of the Navy personnel research program. He talks about the organization of Pers-15, its major accomplishments, and the military staffing within Pers-15. Dr. Carstater discusses the expansion of Navy personnel research programs in Washington and San Diego in the 1960's.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Brundage, Dr. Everett G.
Price, D. George

Institutions:

Bureau of Naval Personnel
Navy Personnel Research and Development Center

Other Entries:

Personnel research

CARTER, ANNE (NANCY)

Interviewer: Elizabeth Anderson and Margaret Paralee Barnes

Date of Interview: May 1, 1975 and November 8, 1983

Documentation: Tapes, 74 page transcript

Abstract: Mrs. Carter discusses the early history of the Sidewinder program (with which she was closely associated), the character of the Sidewinder group, and the management and structure of the old Aviation Ordnance Department at NOTS. The supplement includes further information and restatement of Sidewinder program history. Original interview was not completed because the interviewer was RIFed and the subject left the area.

ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Amlie, Dr. Thomas S.
LaBerge, Dr. Walter B.
Madden, James

McLean, Dr. William B.
Ward, Dr. Newton E.

Institutions:

Naval Weapons Center

Other Entries:

Sidewinder Missile Project

**CHARTIER, WOODROW
CLINTON, CAPT JOHN
FREEDMAN, ROBERT
SEYMOUR, VADM E. R.
VESCOVIO, AMERICO**

Interviewer: Leroy L. Doig, III

Date of Interview: August 19, 1987

Documentation: Tapes, 57 page transcript

Abstract: This interview is one of a group conducted to support the development of an archival unit on the A-7 support activity at NWC and the preparation of the document, *What Have You Done for the Fleet Today? A Brief History of the A-7E Weapon System Support Activity* (NWC AdPub 391). These NAVAIR and NWC A-7 program principals discuss the origins of the A-7 aircraft software and avionics support program at China Lake, the major accomplishments of that program, the people involved in it, and the philosophy of its management by Freedman at China Lake and in Washington. Relationships between NWC, contractors, Fleet, and sponsors; the growth and evolution of software-driven systems, the establishment of a team, the development of support facilities, the requirement for responsiveness, and the fielding of a product are major topics. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Birdwell, CAPT Carl
Doss, CAPT Robert

Fleming, CAPT J. J.
Gallagher, CAPT Tom

Institutions:

Naval Air Station, Lemoore
Naval Air Systems Command
Naval Air Test Center
Naval Ocean Systems Center
Naval Weapons Center

Pacific Missile Test Center
Test & Development Squadron 4 (VX-4)
Test & Development Squadron 5 (VX-5)
Vought/LTV Corporation

Other Entries:

Avionics
Contracting
Fleet support

Mission-support systems
Software development and software
Vietnam war, laboratory support

CHRISTMAN, ALBERT B.

Interviewer: Robert J. Taormina

Date of Interview: January 8, 1980

Documentation: 2 tapes, 59 page transcript

Abstract: Mr. Christman discusses pre-World War I R&D--including the need for R&D work in the Navy, new developments in the Fleet, and means of attracting civilians to Navy research work, and obsolescence of weapons. He also comments on R&D during the two World Wars, particularly scientists' understanding of Fleet needs and the difficulty of getting new technologies

introduced into the Fleet. Christman talks about the difficulties involved in R&D planning in the nuclear age, increasing bureaucracy in Navy R&D, and the reorganization of Navy R&D in the mid-1960's.

Repositories: DTRC

Institutions:
Systems commands

Other Entries:
Bureau system
Navy research and development

CHUBB, DR. TALBOT A.

Interviewer: Richard F. Hirsh

Date of Interview: 1976

Documentation: Tapes

Repositories: AIP

Institutions:
Naval Research Laboratory

Subjects:
Astronomy

CHUBB, DR. TALBOT A.

Interviewer: Richard F. Hirsh

Date of Interview: 1978

Documentation: 2 tapes

Abstract: Dr. Chubb, an NRL space scientist, was interviewed by Richard F. Hirsh as part of his research for his doctoral dissertation on the beginnings of x-ray astronomy. These tapes were produced in conjunction with NASM and AIP.

Repositories: NRL, NASM

Institutions:
American Institute of Physics
National Air and Space Museum
Naval Research Laboratory

Individuals Mentioned:
Bowyer, Dr. C. Stewart

Subjects:
X-ray astronomy



DR. TALBOT A. CHUBB (LEFT) AND DR. HERBERT FRIEDMEN
SHOCK TESTING A DEACON ROCKET PAYLOAD

Other Entries:

Aerobee rocket	Neutron stars
All Altitude Spin Projectile (ASP) munition	Nike-Dan rockets

CLARE, DR. THOMAS**Interviewer:** Dr. Joseph Marchese**Date of Interview:** April 4, 1990**Documentation:** 2 tapes, 22 page transcript, index

Abstract: This interview is one in a series conducted to gather information of the disestablishment of NAVMAT and the establishment of SPAWAR. Dr. Clare initially provides information on his professional background and details his role in the early stages of SPAWAR's WSA&E Directorate, SPAWAR 30. He also discusses various plans to reorganize and streamline command control, and communication (C3) and talks about the opposition he encountered in attempting to carry out his function. Dr. Clare elaborates on the warfare elements in C3 and provides insight into the relationship between the Secretary of the Navy and VADM Glenwood Clark, commander of SPAWAR. He also talks about the differences VADM Clark encountered between his background in a high structured organization in the Special Projects Office and that found in the systems commands. Dr. Clare provides input regarding his multivolume report on C3 as well as his perception of the direction and effectiveness of WSA&E. He also considers the effectiveness of SPAWAR 30 in light of tighter funding controls. Dr. Clare concludes by stating that although the Office of the Assistant Chief of Naval Operations for Naval Warfare, OP-07, supports WSA&E, it does not adequately fund it or view it from an appropriate perspective.

Repositories: DTRC**Individuals Mentioned:**

Batzler, RADM Jack	Leuschner, RADM Robert
Brooks, RADM Dennis	Paisley, Melvyn
Clark, VADM Glenwood	Parker, Steven
Hekman, VADM Peter	Pollard, Dr. James R.
Hogg, ADM James	Topping, RADM Robert
Knudsen, Dr. Ronald	Wessel, Paul
Lehman, John	

Institutions:

CNO Executive Board	Naval Sea Systems Command
David Taylor Research Center	Naval Surface Warfare Center
Johns Hopkins University/Applied Physics Laboratory	Office of the Chief of Naval Operations
Naval Air Systems Command	Office of the Secretary of the Navy
Naval Electronic Systems Command	Space and Naval Warfare Systems Command
Naval Industrial Fund	Special Projects Office
Naval Ocean Systems Center	U.S. Congress

Subjects:

AEGIS Program	Information warfare support system
Antiair warfare	Multi-platform level
Battleforce level	Research and development centers
Battle Management Architecture Report	Software intensive system
Combat system architecture	Strategic launched ballistic missile system
Command control, and communication	Tactical communication system
Command support system	Top-level design requirements
Disestablishment of NAVMAT	Warfare systems architecture and engineering
Establishment of SPAWAR	
Funding	
Information Transfer System Program	

CLARK, VADM GLENWOOD

Interviewer: Dr. Joseph Marchese

Date of Interview: September 15, 1988

Documentation: 3 tapes, 50 page transcript, index

Abstract: This interview is one in a series to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. VADM Clark provides his professional background and explains the rationale behind his selection as Commander of SPAWAR (COMSPAWAR) and delineates the priorities assigned to him in SPAWAR. He also provides his explanation of WSA&E and discusses his role as COMSPAWAR. VADM Clark details his activities regarding acquisition and WSA&E and describes the scenario immediately prior to the establishment of SPAWAR. He also details the diversity of operations in SPAWAR and addresses the issue of taking the research and development centers out of the Office of the Chief of Naval Research (OCNR) and placing them in SPAWAR. VADM Clark describes the relationship between the directors of the R&D centers and SPAWAR. He provides insight into the role his staff played in shaping SPAWAR's identity as well as the role of the DNL in SPAWAR. He distinguishes between laboratories and R&D centers before assessing the effectiveness of the R&D centers after their incorporation into SPAWAR. He then chronicles actions taken to correct problems in the R&D centers before discussing the current (as of 1988) strengths and weaknesses of the R&D centers. VADM Clark gives his opinion of the concept of the full-spectrum R&D center and elaborates on in-house vs out-of-house work in the R&D centers. He then mentions efforts to clearly define each center's mission. He also addresses the threat posed by the possible elimination of Navy Industrial Fund (NIF) funding for the R&D centers; examines the management of the university laboratories; describes the differences between the university laboratories and the R&D centers; and provides his opinion on the future use by the Navy of the university laboratories. VADM Clark addresses the difficulties SPAWAR has encountered in trying to reduce the procurement time of its products and the issue of excessive carry over in the R&D centers. He deals with the difficulty the R&D centers have in offering better pay to attract people, and examines the personnel demonstration projects at NOSC and NWC. VADM Clark evaluates the quality of the technical directors (TDs) at the R&D centers and elaborates on input from systems commands regarding TD selections. He deliberates on the establishment of the Material Professional (MP) position, delineates the qualities required for good commanding officers of R&D centers, and considers their future after serving at an R&D center. VADM Clark discusses the character of work performed in R&D centers; addresses the issue

of whether work is kept too long in the R&D phase; whether R&D centers duplicate each others work; and whether products transition effectively to the fleet. He deliberates on the Navy's involvement in WSA&E and the complexities in funding the new function. VADM Clark deals with how other systems commands view the quality of work by the R&D centers and discusses the issue of "encroachment" by the private sector and other government agencies on the Navy's R&D centers. He then examines the conclusions of three major studies: those of Coopers-Lybrand, Inc.; the Defense Science Board (DSB); and the Institute for Defense Analysis (IDA). VADM Clark also provides insight into the funding of the Navy's technology-base activities; the Navy's failure to take higher risks in technology-base work; and the problem of obtaining an optimal balance in the R&D centers between technology-base, engineering development, and fleet support. He addresses the issue of the Navy's R&D centers' lack of involvement in the Strategic Defense Initiative (SDI) and concludes his interview by predicting the future of the R&D centers and assessing his tour as COMSPAWAR.

Repositories: DTRC

Individuals Mentioned:

Alvarez, Dr. Luis W.
Deutsch, John
Dilworth, Guy
Doak, Robert
Graham, CAPT C.

Lehman, John
Paisley, Melvyn
Pyatt, Everett
Reed, Jerry
Tunstall, Dr. Edward

Institutions:

Applied Physics Laboratory/University of Washington
Applied Research Laboratory/Pennsylvania State University
Bureau of Aeronautics
David Taylor Research Center
Defense Advanced Research Projects Agency
Defense Science Board
Department of Defense
Fleet Ballistic Missile Project Office
Institute for Defense Analysis
Johns Hopkins University/Applied Physics Laboratory
Naval Air Development Center
Naval Air Systems Command
Naval Coastal Systems Center
Naval Electronic Systems Command
Naval Material Command
Naval Personnel Research and Development Center

Naval Postgraduate School
Naval Sea System Command
Naval Supply Systems Command
Naval Surface Warfare Center
Naval Undersea Systems Center
Naval Weapons Center
Navy Management System Support Office
Office of Naval Research
Office of the Chief of Naval Operations
Office of the Chief of Naval Research
Office of the Director of Navy Laboratories
Office of the Secretary of Defense
Office of the Secretary of the Navy for Acquisition
Office of the Undersecretary of Defense
Space and Naval Warfare Systems Command
Strategic Systems Project Office
Systems Planning Analysis, Inc.

Subjects:

Acquisition management	Navy Industrial Fund
AEGIS program	Platform-unique programs
Antisubmarine warfare (ASW)	Reconnaissance, Electronic Warfare,
Command control, communication, and intelligence	Special Operations, Intelligence
Contracting complexities	Relocatable Over-the-Horizon Radar
Coopers-Lybrand study	Research and development centers
Defense Science Board	Research, development, test, and evaluation (RDT&E)
Director of Navy Laboratories	Resource management systems
Disestablishment of NAVMAT	Shipboard Non-tactical ADP Processing
Electronic warfare	strategic Defense Initiative
Establishment of SPAWAR	Technical directors
Force-pervasive	Top-level warfare requirements
In-service engineering	Warfare systems architecture and engineering
Independent research/independent exploratory development	Weapons systems
Institute for Defense Analysis report	Zero risk environment
Material professional program	

CLARK, VADM GLENWOOD

Interviewer: Dr. Joseph Marchese

Date of Interview: May 23, 1990

Documentation: 3 tapes, 72 page transcript, index

Abstract: This interview, the second done with VADM Clark, is one in a series to gather information regarding the disestablishment of NAVMAT and the establishment of SPAWAR. VADM Clark initiates the interview with a review of SPAWAR's draft organization and concept of operations and discusses the lack of support which was needed for SPAWAR to carry out its WSA&E function. He also elaborates on the possibility of contracting the WSA&E function and the difficulties encountered by SPAWAR in building a foundation for WSA&E, considering the lack of talent and funding within SPAWAR for that function. VADM Clark details efforts to attract competent people into SPAWAR and discusses his memorandum of 29 November 1985 regarding his assessment of the need to effect additional changes in the Navy's material establishment even after the disestablishment of NAVMAT. He provides insight into the reaction of other systems commands to SPAWAR and addresses the impact of Dr. Colvard's "Haul-Down" report and the meeting on 15 January 1986 in the Office of the Chief of Naval Operations (OPNAV) on SPAWAR's missions and organization. VADM Clark also discusses his use of overhead of the research and development (R&D) centers to support WSA&E and the controversy that action created in the systems commands, OPNAV, and other offices in the Pentagon. He considers two drafts of a memorandum that resulted from the above meeting on 15 January 1986 and details Mr. Paisley's involvement in the transfer of the R&D centers to SPAWAR. VADM Clark conducts a discussion of the transfer of the hardware programs out of SPAWAR and elaborates on the Naval Sea Systems Command (NAVSEA) memorandum of 17 June 1987 which deals with the issue of the realignment of the R&D centers with the individual systems commands. He provides insight into the rationale behind the structure of SPAWAR 30, the changes that occurred in SPAWAR 31 and 32, and the continuing difficulty in getting qualified personnel for SPAWAR 30. VADM Clark assesses the status of the WSA&E function when he retired as Commander of SPAWAR and addresses the

continuing issue of support and acceptance of WSA&E in the Navy. He elaborates on the role OP-095 played in support of WSA&E and details how effective WSA&E can be in the future Navy if basic changes occur. To illustrate this, VADM Clark used program control in OP-02 as an example. VADM Clark discusses the Space mission in SPAWAR, the evolution of the ASW Programs Directorate (PD 80), the rationale behind the selection of RADM Dorman to head PD 80, the rationale behind placing ASW in SPAWAR. He elaborates on this effort to improve the acquisition management he inherited from the old Naval Electronic Systems Command system as well as on his efforts to enhance the command control, communications, and intelligence (C3I) function. VADM Clark considers the issue of how to treat space systems and assesses the reorganization of acquisition management. He discusses the difficulties in trying to assess SPAWAR presently and addresses the issue of technical competence of federal employees and specifically of employees in the systems commands. VADM Clark addresses the question of his effectiveness as Commander of SPAWAR and the impact of his personality on the command. He also discusses the issue of Robert Doak's management style. VADM Clark elaborates on the subject of the warfare systems controlled interface document (WSCID) and concludes by giving his own assessment of his years at SPAWAR as well as an evaluation of the placement of WSA&E in SPAWAR.

Repositories: DTRC

Individuals Mentioned:

Aldrich, Peter
 Baciocco, VADM Albert
 Batzler, RADM Jack
 Bodensteiner, RADM Wayne
 Busey, ADM James
 Cann, Gerald
 Clare, Dr. Thomas
 Colvard, Dr. James
 DiMascio, Dr. A. J.
 Doak, Robert
 Dorman, RADM Craig
 Hogg, ADM James
 Langston, CDR Marvin
 Latham, Dr. Donald
 Lehman, John
 Mattingly, RADM Thomas K., II

McBurnett, Genie
 Meyer, RADM Wayne
 Miller, VADM Richard
 Mills, James
 Mooney, RADM John Bradford
 Paisley, Melvyn
 Pollard, Dr. James R.
 Rowden, VADM William
 Simpleman, COL Louis
 Topping, RADM Robert
 Vogt, RADM Larry
 Watkins, ADM James
 Weaver, RADM John
 Wilkinson, VADM Joseph, Jr.
 Wolkensdorfer, RADM Daniel

Institutions:

David Taylor Research Center
 Government Accounting Office
 Naval Air Development Center
 Naval Air Systems Command
 Naval Coastal Systems Center
 Naval Electronic Systems Command
 Naval Material Command
 Naval Research Laboratory
 Naval Sea Systems Command
 Naval Space Command

Naval Surface Warfare Center
 Naval Undersea Systems Center
 Naval Weapons Center
 Office of Naval Acquisition Support
 Office of Naval Research
 Office of the Chief of Naval Operations
 Office of the Secretary of the Navy
 Space and Naval Warfare Systems Command
 Strategic Systems Project Office

Subjects:

Acquisition management
AEGIS program
Antisubmarine warfare (ASW)
Battleforce top-level requirements
Command control, communication, and intelligence
Disestablishment of NAVMAT
Electronic warfare
Establishment of SPAWAR
Fleet ballistic missile program
Funding, problems associated with
"Haul Down" report
Integrated undersea surveillance system
Life cycle support function
Management of SPAWAR

Nuclear attack submarine program
Principal technical agent
Reconnaissance, Electronic Warfare, Special Operations, and Intelligence
Research and development centers
Shipboard Non-tactical ADP Processing
Standard Automated Financial System (STAFS)
Ultra-high frequency follow-on satellite
Very-high frequency radio
Warfare Systems Architecture and Engineering
Warfare systems controlled interface document

CLEETON, DR. CLAUD E.

Interviewer: Dr. David K. Allison

Date of Interview: January 22, 1979

Documentation: 2 tapes

Abstract: Dr. Cleeton gives his perspective on Naval electronics research and applications from 1936-1972. Cleeton conducted pioneering research in microwave communications and digital electronic circuits, and directed NRL programs in radar identification, advanced radar development and applications, particularly in relation to the Space Surveillance System.

Repositories: NRL

Institutions:

Naval Research Laboratory

Subjects:

Digital systems
Electronic equipment
Microwave communications

Radar
Space surveillance system

COLLINS, DR. JOHN

Interviewer: Roger Kempler

Date of Interview: July 27 1982

Documentation: 43 page transcript, index

Abstract: Dr. Collins discusses key people in the Personnel Research Division of BUPERS, the Personnel Research Field Activity (PRFA), and the attitude of BUPERS toward personnel research. He talks about supervision of PRFA, differences between the San Diego and Washington branches of PRFA, and

criticism of the existence of two personnel research units. Collins talks about new developments in human factors engineering, growth in personnel research in the 1960's, the opposition to the formation of NPRDC. He describes his role in NPRDC's formation, the work of others in its formation, and his relationship with the Office of Naval Research. Collins explains the major problems that NPRDC faced at its inception, NPRDC as a CNM managed lab, and his views on the possible merger of NPRDC with another lab.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Frosch, Dr. Robert A.
Price, D. George
Regan, Dr. James J.

Institutions:

Bureau of Naval Personnel	Office of Naval Research
Navy Personnel Research and Development Center	Personnel Research Field Activity
Office of Chief of Naval Material	

Other Entries:

Human factors engineering
Personnel research

COLVARD, DR. JAMES

Interviewer: Cynthia Rouse

Date of Interview: December 10, 1976

Documentation: 18 page transcript

Abstract: This interview covers Dr. Colvard's experiences at NSWC from 1969 to 1973. The interview concentrates on the merger of NPG, Dahlgren and NOL, White Oak to form NSWC in 1974. Colvard also comments on the administrative difficulties involved at Dahlgren and White Oak, on attempts by the Navy to "micro-manage" research and development, on the role of Navy officers in weapons development, and briefly on the history and future of NSWC, and in particular of the Combat Systems Integration Department.

Repositories: DTRC

Institutions:

Naval Material Command	Naval Surface Weapons Center
Naval Ordnance Laboratory, White Oak	Naval Weapons Center
Naval Proving Ground, Dahlgren	

Subjects:

"Centers of Excellence"	Management of research and development
Formation of the Naval Surface Warfare Center	Role of naval officers in R&D
	Weapons development

COLVARD, DR. JAMES

Interviewer: Dr. Vincent Ponko, Jr.

Date of Interview: November 3, 1980

Documentation: 2 tapes, 40 page transcript, index

Abstract: Dr. Colvard describes his first work assignments at NOTS in the 1950's, his time at the Applied Physics Laboratory, Johns Hopkins, working on satellite trackers for nuclear subs, and his return to NOTS in 1962. He talks about NOTS' relations with Washington, his association with Exploratory Development projects at China Lake, and the adverse effects on fire control systems of taking the lab out of the Naval Ordnance Systems Command. Colvard comments on CNM command of the labs, the establishment of the Office of the Director of Navy Laboratories, his promotion to division head at China Lake, and McLean as NOTS Technical Director. He describes his transfer to the Naval Weapons Center at Dahlgren, VA., in 1969, his promotion to Technical Director, and the combination of NWC and NOL-White Oak into one center, the Naval Surface Weapons Center. He explains the NSWC organization and comments on the problems he had at NSWC. He talks generally about the Navy in-house laboratory system as a whole, civilian-military relationships in the Navy, and the current Navy R&D situation.

Repositories: DTRC

Individuals Mentioned:

Amlie, Dr. Thomas S.

Gralla, VADM Arthur R.

McLean, Dr. William B.

Smith, Bernard

Institutions:

Director of Navy Laboratories

Johns Hopkins University/Applied Physics
Laboratory

Naval Ordnance Test Station

Naval Surface Weapons Center

Naval Weapons Center

Other Entries:

Director of Navy Laboratories

Establishment of Naval Surface Weapons
Center

Laboratory consolidations;

Research and development

COLVARD, DR. JAMES

Interviewer: Dr. Joseph Marchese

Date of Interview: August 3, 1989

Documentation: 2 tapes, 22 page transcript, index

Abstract: This interview is one of a series conducted to gather material for a history of the development of the MK 48 Torpedo. Colvard provides an account of torpedo development programs prior to the creation of the MK 48, the institutional tensions surrounding the MK 48 program and the rationale involved in assigning responsibilities to different Navy R&D centers and laboratories in the program. Colvard also discusses the Navy's approach to research and development, the allocation of resources, the inherent

inefficiency of research, the tradeoffs necessary in the Navy's research and development community, and the "corporate approach" to Naval research and development.

Repositories: DTRC

Institutions:

Clevite Corporation
Naval Ordnance Laboratory
Naval Underwater Systems Center
Navy laboratories

Navy R&D centers
Systems commands
Westinghouse Corporation

Subjects:

"Corporate approach"
Director of Navy Laboratories
Duplication of effort
Efficiency
Mine warfare
Mission statements

MK 48 torpedo
Multiple perspective approach
Research and development
Resource management
Technical directors
Torpedo development

COLVARD, DR. JAMES

Interviewer: Dr. Joseph Marchese

Date of Interview: March 2, 1990

Documentation: 1 tape, 33 page transcript, index

Abstract: This interview is one in a series to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Dr. Colvard begins his interview by discussing the evolution of the concept of WSA&E and the factors that led to placing that function in SPAWAR. He continues his discourse with an examination of the genesis of the concept of rational execution and integration and how a group of senior naval officers initiated discussions on the design of a technical architecture to meet warfare requirements. Dr. Colvard also elaborates on the perceived role of NAVELEX with WSA&E and the political events that overtook plans for NAVELEX. He addresses the development of oversight responsibilities for SPAWAR and the problems experienced while trying to strengthen the position of COMSPAWARSYSCOM. Dr. Colvard discusses the rationale behind his "haul down" report and elaborates on the changes that occurred in SPAWAR in response to his report. He also provides insight into the differences COMSPAWAR faced coming from the Special Project Office (SPO) to SPAWAR. Dr. Colvard examines why programs other than WSA&E were left in SPAWAR. He then discusses the rationale behind moving the R&D centers under the Chief of Naval Research (CNR) and how this differed from his recommendation and those of others in the Navy. Dr. Colvard also details the problems he perceived would result from placing the R&D centers under the CNR. He provides insight into the move of the R&D centers from CNR to SPAWAR and then provides background information regarding the Office of Naval Acquisition Support (ONAS) and his views of that office. Dr. Colvard discusses the optimal placement of the R&D centers and the effectiveness of the R&D centers in SPAWAR. He elaborates on SPAWAR's effectiveness with WSA&E, its funding difficulties for WSA&E, and how these funding problems are connected with the disestablishment of NAVMAT. Dr. Colvard then addresses the reasons behind NAVMAT's disestablishment and concludes with a discussion of the value of history for understanding events.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
Baggett, VADM Lee
Busey, ADM James
Clark, VADM Glenwood
Dimascio, Dr. A. J.
Hogg, ADM James
Hostettler, RADM S. J.
Hunt, William
Lehman, John
Lewis, RADM J. R.
Meyer, RADM Wayne

Miller, VADM Richard
Mills, James
Mooney, RADM John Bradford
Morton, Gary
Paisley, Melvyn
Pyatt, Everett
Reed, Jerry
Rice, RADM Joseph
Schiefer, Gerald
Tunstall, Dr. Edward
Wheaton, Ward

Institutions:

Acquisition Review Board
Dunn and Bradstreet
Minneapolis Honeywell, Inc.
Naval Air Systems Command
Naval Coastal Systems Center
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Center

Naval Research Laboratory
Naval Sea Systems Command
Naval Surface Warfare Center
Naval Weapons Center
Office of Naval Acquisition Support
Office of Naval Research
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command

Subjects:

AEGIS program
Disestablishment of NAVMAT
Establishment of SPAWAR
Fleet ballistic missiles
Force-pervasive
Goldwater/Nichols/Bell Defense
Management Review Bill
"Haul Down" report

Naval Electronic Systems Command
Office of Naval Acquisition Support
Platform specific
Research and development
Tentative operational requirements
TOMAHAWK cruise missile program
Warfare systems architecture and
engineering

CONNOLLY, VADM THOMAS F.

Interviewer: Unknown

Date of Interview: November 8, 1968

Documentation: 16 page transcript, index

Abstract: VADM Connolly makes a testimonial speech to the employees, former employees, and friends of the Naval Weapons Center.

Repositories: NWC, DTRC, NHC

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

COOPER, DR. EUGENE P.

Interviewer: J. D. Gerrard-Gough

Date of Interview: October 24, 1975

Documentation: 18 page transcript, index

Abstract: Dr. Cooper remembers the controversy over the location of NOTS and discusses his background in theoretical and nuclear physics. He describes fire control problems with aircraft and tells why he left NOTS. Cooper comments on his time at the University of Oregon and his return to NOTS-Pasadena. He expostulates on underwater ordnance research, his time as Associate Head of the Underwater Ordnance Department, and his feelings about NOTS at China Lake and at Pasadena.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

McLean, Dr. William B.

Saylor, William

Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station

Subjects:

Naval Ordnance Test Station

Underwater Ordnance

COOPER, DR. EUGENE P.

Interviewer: George Scott

Date of Interview: July 5, 1988

Documentation: 1 tape, 15 page transcript

Abstract: Dr. Cooper discusses his career at NDTS Pasadena, Naval Radiological Defense Lab (NRDL), Naval Undersea Center (NUC), and NOSC. The interview includes a discussion of Cooper's education, his work on underwater ordnance at NDTS, participation in atomic bomb testing as division head at Naval Research and Development Center (NRDC), and his roles in independent research/independent exploratory development (IR/IED) and long range planning at NWC and NOSC.

Repositories: NOSC

Individuals Mentioned:

Blood, Howard

Hicks, Walter E.

Hillyer, Robert

McLean, Dr. William B.

Wilcox, Douglas J.

Wilcox, Dr. Howard A.

Wilson, Don

Institutions:

Naval Ocean System Center
Naval Radiological Defense Laboratory

Naval Undersea Center
Peak Franklin Institute

Subjects:

Underwater ordnance

Other Entries:

Independent research/independent exploratory development

CORDER, JAMES L.

Interviewer: Carole E. Nowicke

Date of Interview: December 11, 1985

Documentation: Tapes, 9 page transcript

Abstract: Mr. Corder briefly discusses his education and background prior to his appointment at Marine Engineering Laboratory (MEL) VLAP in 1966. The surviving transcript relates a series of anecdotes related to his experiences in Vietnam as a member of Naval Undersea Research and Development Unit (NURDU).

Repositories: DTRC

Individuals Mentioned:

Murray, Dr. William
Piper, Barry
Sheppard, B. M.

Institutions:

David Taylor Research Center
Naval Sea Systems Command
Naval Surface Warfare Center

**CORZINE, ROBERT G.
SPRANKLE, PHILLIP**

Interviewer: Leroy L. Doig, III

Date of Interview: 1984

Documentation: Videotapes, transcript

Abstract: Interview conducted as background material for special project for Electronic Warfare Department.

Repositories: NWC

Institutions:

Naval Weapons Center

Other Entries:
Antiradiation missile
Electronic warfare

COUPERUS, PIERCE G.

Interviewer: Richard D. Glasow

Date of Interview: August 23, 1980

Documentation: Tapes, transcript

Abstract: Mr. Couperus describes his background and education, and his work with the Harvard Underwater Sound Laboratory.

Repositories: NUM

Individuals Mentioned:
Smith, Fred

Institutions:
Harvard University/Underwater Sound Laboratory

Other Entries:
Acoustics research

COZZENS, ERNEST G.

Interviewer: Leroy L. Doig, III

Date of Interview: June 25, 1981

Documentation: 47 page transcript, index

Abstract: Mr. Cozzens explains his background, his involvement with Sidewinder, and comments on recent developments in air-to-air weaponry. He talks about relationships with contractors, quality control, and the cost and effectiveness of weapons. Cozzens discusses NWC's relationships with other labs and with the Naval hierarchy in Washington and reflects on Tom Amlie's tenure as Technical Director. He lists NOTS/NWC's contributions to the Navy.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:
Amlie, Dr. Thomas S.
McLean, Dr. William B.
Thompson, Dr. Louis T. E.

Institutions:
Naval Ordnance Test Station
Naval Weapons Center

Other Entries:
Air-to-air weaponry
Quality control

Sidewinder missile project
Technical directors

CRARY, DR. ALBERT P.

Interviewer: Unknown

Date of Interview: 1962

Documentation: 87 page transcript

Abstract: Dr. Crary talks about his work in oceanography and geophysics, involvement with the International Geophysical Year (IGY), early LORAN and SOFAR, air acoustics and balloons.

Repositories: COL

Subjects:
Hyperbolic navigation
International Geophysical Year
Oceanography

Other Entries:
Long range navigation
Sound fixing and ranging

CRAWFORD, JACK A.

Interviewer: Elizabeth Babcock

Date of Interview: September 20, 1988

Documentation: 59 page transcript, index

Abstract: Mr. Crawford discusses his role in the development and management of the Walleye, Condor, the rolling airframe missile (RAM), and Skipper systems. He also recalls interesting anecdotes in connection with his work on RAM of the Korean War era, the MK 16 fire-control system, NOTSNIK, and the antisubmarine rocket (ASROC). Of particular interest are his recollections of the invention, design, development, and subsequent successes of the Walleye television-guided bomb, which was invented by Mr. Crawford and Bill Woodworth (also a NOTS-NWC employee). He compares and contrasts management approaches to the Walleye and the Condor programs (both of which he served as program manager), and provides insights into changing management philosophies relative to funding, involvement of Washington, and involvement of contractors:

Repositories: NWC

Individuals Mentioned:

McLean, Dr. William B.
Swift, Dr. I. Henry

Ward, Dr. Newton E.
Woodworth, William H.

Institutions:

Naval Ordnance Laboratory
Naval Ordnance Test Station
Naval Weapons

Other Entries:

Antisubmarine rocket (ASROC)
Condor missile
Contractors
Fire control system, MK 1
Funding

Naval Ordnance Test Station Satellite
Program management philosophy
Rolling Airframe Missile (RAM)
Walleye missile project

CROOK, MARY CHARLOTTE

Interviewer: Dr. David K. Allison

Date of Interview: August 14, 1984

Documentation: Tapes, list of questions

Abstract: Crook discusses her background and education and her years as administrative assistant in the Structural Mechanics Department of the David Taylor Model Basin (DTMB). The interview includes reminiscences of various former department heads, commanding officers, and technical directors of DTMB.

Repositories: DTRC

Individuals Mentioned:

Heller, CDR S. R.
Keil, Dr. Alfred H.
Kennard, E. H.
Landweber, Dr. Louis
Murray, Dr. William

Osgood, W. R.
Saunders, CAPT Harold E.
Taylor, RADM David W.
Windenburg, Dr. Dwight F.
Zahm, Dr. Albert F.

Institutions:

Bureau of Ships
David Taylor Model Basin
Naval Material Command

Subjects:

Administrative management
David Taylor Model Basin
Facilities management

Ship structures
Technical directors

CROSBIE, RICHARD

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 3, 1982

Documentation: 2 tapes, index

Abstract: Mr. Crosbie talks about the Human Centrifuge at Naval Air Development Center (NADC), the dynamic flight simulation of the X-15 Rocket Airplane, Boeing 707, and flight simulation training for the Project Mercury astronauts. He comments on the LBJ Space Center in Houston, Texas, and the development of the NADC in-house computer, Typhoon. Crosbie describes NADC's relations with the University of Pennsylvania, AMAL Projects, and Human Centrifuge projects, including the world's record of 31.25 G's for five seconds, set by R. Flanagan Gray. He discusses the Directorate Programs and the Systems Approach.

Repositories: NADC, DTRC

Individuals Mentioned:

Gray, R. Flanagan
Hardy, Dr. James D.
Poppin, CAPT Jack R.

Institutions:

American Medical Acceleration Laboratory	Johnson Space Center
Boeing Airplane Company	Naval Air Development Center
Bureau of Medicine and Surgery	University of Pennsylvania

Subjects:

Aerospace medicine	Computers
Centrifuges	Space simulation

Other Entries:

Federal contract research centers	Systems approach
Human centrifuge	Typhoon Project

CUMMINS, DR. WILLIAM E.

Interviewer: Albert B. Christman

Date of Interview: March 28, 1978

Documentation: 1 tape

Repositories: DTRC

Institutions:

Naval Ship Research and Development Center

CUMMINS, DR. WILLIAM E.

Interviewer: Dr. David K. Allison

Date of Interview: August 2, 1982

Documentation: 7 tapes, 92 page transcript, index



RICHARD CROSBIE
OF THE NAVAL AIR DEVELOPMENT CENTER

Abstract: Dr. Cummins relates his early training in naval architecture, working conditions at the Experimental Model Basin and the David Taylor Model Basin in the 1940's, and his views on the engineering ability and management style of CAPT Harold Saunders. He mentions the GUPPY program, submarine hull design, seaworthiness studies for several types of ships, describes testing procedures and the Polaris program in detail, reorganizations during the 1960's and relations between NAVSEA and DTRC.

Repositories: DTRC

Individuals Mentioned:

Ellsworth, William
Hill, Johnny
Janes, Charlie
Landweber, Dr. Louis

Saunders, CAPT Harold E.
Schoenherr, Dr. Karl E.
St. Denis, Manley

Institutions:

David Taylor Model Basin
David Taylor Naval Ship Research and
Development Center
Experimental Model Basin
Naval Sea Systems Command

Naval Ship Research and Development
Center
Society of Naval Architects
Webb Institute

Subjects:

Cavitation
David Taylor Model Basin
Hull design
Hydrodynamics
Hydromechanics
Naval Sea Systems Command

Seaworthiness
Submarines
Torpedoes
Waveform generators
Waveforms

Other Entries:

FIDO (Mk 24 torpedo)
Greater underwater propulsive power
Model basins

Model testing
Polaris program
Seakeeping

CUSTER, CAPT BENJAMIN SCOTT

Interviewer: Unknown

Date of Interview: 1965

Documentation: 1022 page transcript

Abstract: Of interest in this interview are CAPT Custer's recollections of his career in early Naval aviation, his flying boat squadron, command of the *NORTON SOUND* and involvement with the Manhattan project.

Repositories: COL, NHC

Other Entries:

Flying boats
Manhattan Project

Naval aviation
USS NORTON SOUND

CUTHILL, DR. ELIZABETH

Interviewer: Carole E. Nowicke

Date of Interview: December 3, 1985

Documentation: 3 tapes, 19 page transcript

Abstract: Dr. Cuthill discusses her academic background, her reasons for coming to work for NOL, the role of women in computer development, the problems faced in the development of computer technology, the role of NOL in mathematics, and the funding problems which led to the loss of NOL's leading role in these areas.

Repositories: DTRC

Individuals Mentioned:

Rickover, ADM Hyman

Institutions:

David Taylor Model Basin

Johns Hopkins Applied Physics Laboratory

Naval Ordnance Laboratory

Other Entries:

Computers

Nautilus

Funding

Naval Ordnance Laboratory

DAPPER, JAMES

Interviewer: Dr. David K. Allison

Date of Interview: January 12, 1983

Documentation: 2 tapes, 18 page transcript

Abstract: Mr. Dapper discusses his education at the Webb Institute, mentions previous employment at BUSHIPS and NAVSEA, and reviews the history of the technological development of submarine design. He comments on German submarine snorkeling systems and hydrogen peroxide engines, the limitations of Japanese submarines, the GUPPY program, the TANG class submarine, designing the ALBACORE hull form, the experimental X-1 submarine, the BARBEL a diesel submarine with an Albacore-type hull, the GRAYBACK and the Regulus missile, the DOLPHIN, design changes in the SKIPJACK including HY-100 steel, a single screw and a new bowplane, the twin screw twin reactor TRITON, the electric drive TULLIBEE, poor living conditions on submarines, design changes of the THRESHER, the Polaris submarine, torpedos, and submarine components.

Repositories: DTRC

Individuals Mentioned:

Rickover, ADM Hyman

Institutions:

David Taylor Naval Ship Research and Development Center
Webb Institute

Subjects:

Hull design	Submarine acoustics
Hydrodynamics	Submarine hulls
Marine nuclear propulsion	Submarine snorkels
Propulsive efficiency	Underwater propulsion
Ship design	

Other Entries:

Greater underwater propulsive power	USS ALBACORE
HY-100 steel	USS DOLPHIN
Hydrogen peroxide engines	USS GRAYBACK
Naval Research Laboratory	USS SKIPJACK
Polaris program	USS TANG
Regulus missile	USS THRESHER
Submarine X-1	USS TRITON
Two-cycle diesel engines	

DAVIS, DR. CHARLES M.

Interviewer: Dr. David F. Allison

Date of Interview: July 1, 1982

Documentation: 2 tapes, 28 page partial transcript, index

Abstract: NRL pioneered in fiber optics research and has been the Navy's lead laboratory for the tri-service Fiber Optics Sensor System (FOSS) development program. Dr. Davis discusses early experimentation, cultivating support and trying to obtain funding from Defense Advanced Research Projects Agency (DARPA), NRL and NAVMAT, how the program was managed, co-workers, and the difficulty of recruiting qualified personnel.

Repositories: NRL

Institutions:

DARPA	Naval Research Laboratory
John Carroll University	Office of Naval Research
Naval Material Command	Thompson Ramo-Wooldridge Corporation

Individuals Mentioned:

Berman, Dr. Alan	Henifin, CAPT Edward E.
Bucaro, Joe	Probus, Dr. James H.
Carome, Dr. Edward F.	Shajenko, Peter
Donovan, Jack	Windsor, Harry
Giallorenzi, Dr. Thomas G.	

Subjects:

Fiber optics	Hydroacoustics
Funding	Hydrophones

Other Entries:

Fiber optic hydrophone
Fiber optics sensor system
Systems commands

DAWSON, VICTOR

Interviewer: Dr. Joseph Marchese

Date of Interview: August 9, 1989

Documentation: 1 tape, 9 page transcript, index

Abstract: This interview is one of a series conducted to gather material for a history of the development of the MK 48 Torpedo. Dawson was in charge of the Underwater Department of the Naval Surface Warfare Center during some of the development of the MK 48. The interview concentrates on the work done at the Naval Ordnance Laboratory on the MK 48, the development of the cone filter acoustic acquisition system at NOL, and the transfer of technical direction of the MK 48 program to the Naval Underwater Systems Center.

Repositories: DTRC

Institutions:

Applied Research Laboratory/Pennsylvania	Naval Ordnance Laboratory
State University	Naval Sea Systems Command
California Institute of Technology	Naval Surface Weapons Center
Clevite Corporation	Naval Underwater Systems Center
Harvard University	Westinghouse Corporation
Naval Ocean Systems Center	

Subjects:

Acoustic homing
Technical direction
Torpedo development

DICKERSON, CAPT KENNETH A.

Interviewer: Leroy L. Doig, III

Date of Interview: June 13, 20, 1986

Documentation: Tapes, 43 page transcript

Abstract: CAPT Dickerson discusses his tour at China Lake, stressing the military-civilian teamwork that was required to make things work. He talks about his first impressions, the different atmosphere of a laboratory, the problem programs he faced (including HARM Low-Cost Seeker, ACIMD, Bigeye), the contributions of the Center, the politics of military RDT&E, and the "firing" of Burrell Hays at Paisley's hands. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Hays, Burrell W.
Paisley, Melvyn

Porter, William B.
Schiefer, Gerald

Institutions:

Naval Weapons Center

Other Entries:

Advanced Common Intercept Missile
Demonstration
Bigeye bomb

High-Speed Antiradiation Missile
(HARM)
Naval Weapons Center

DIEHL, CAPT WALTER S.

Interviewer: Unknown

Date of Interview: 1965

Documentation: 93 page transcript

Abstract: CAPT Diehl recalls his work in aerodynamics and aeronautics, designing and testing Navy airplanes, his participation in World Wars I and II, and his work at the David Taylor Model Basin.

Repositories: COL, NHC

Institutions:

David Taylor Model Basin
Experimental Model Basin

Subjects:

Aerodynamics
Aeronautics

DIPOL, C. JOHN

Interviewer: Leroy L. Doig, III

Date of Interview: February 9, 1981

Documentation: 23 page transcript, index

Abstract: Mr. DiPol comments on his arrival at NWC, the mission of the ranges, and range improvements. He mentions changes in NWC work, trends for the future, and NWC relationships with other agencies and labs. DiPol discusses the contributions of NWC, his personal philosophy on the RDT&E environment, and the people that make up China Lake and its surrounding communities.

Repositories: NWC, DTRC

Individuals Mentioned:

McLean, Dr. William B.

Institutions:

Naval Weapons Center

Subjects:

Naval Weapons Center

Research, development, test, and evaluation (RDT&E)

DOAK, ROBERT

Interviewer: Dr. Joseph Marchese

Date of Interview: April 17, 1990

Documentation: 1 tape, 30 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Doak initially describes the conditions in SPAWAR during its first year in operation and elaborates on the problems with acquisition in NAVELEX. He discusses SPAWAR's efforts to improve acquisition by transforming many of the matrix organizations prevalent in NAVELEX into vertical ones. Mr. Doak elaborates on his positions both at SPO and at SPAWAR and addresses the transfer of 51 programs from SPAWAR to the Naval Air Systems Command (NAVAIR) and NAVSEA. He details the organizational changes effecting the DNL in SPAWAR and illustrates problems with the selections of DNLs. Mr. Doak describes the role of SPAWAR 10 and comments on the relationship between SPAWAR and the other systems commands, especially regarding WSA&E and the perception Commanders of NAVAIR and NAVSEA had of that function. Mr. Doak outlines the reactions of the systems commands to the placement of the R&D centers under SPAWAR and relates information regarding organizational consolidation under SPAWAR 10. He addresses his effectiveness as Deputy Commander of SPAWAR and how to assess the effectiveness of SPAWAR's changes in acquisition over the last five years. Mr. Doak then evaluates the effectiveness of SPAWAR's management both of WSA&E and of the R&D centers. He evaluates ADM Clark's command of SPAWAR and details the constraints placed on ADM Clark at that time. Finally, Mr. Doak returns to the issue of WSA&E. He considers whether WSA&E ought to continue as a Navy function and, if so, in what organization; funding problems associated with WSA&E; whether the Navy has a firm commitment to WSA&E; the role of the R&D centers in WSA&E; and likely customers for the WSA&E function.

Repositories: DTRC

Individuals Mentioned:

Bailey, Donald

Brooks, RADM Dennis

Busey, ADM James

Clark, VADM Glenwood

Colvard, Dr. James

Diederich, Dr. Franklin

Gentz, VADM Richard

Grich, RADM Richard

Hekman, VADM Peter

Hogg, ADM James

Holloway, RADM Lowell

Huang, Theodore S.

Hunt, William

Lehman, John

Mattingly, RADM Thomas K., II

Meyer, RADM Wayne

Mills, James

Reed, Jerry

Rowden, VADM William

Simon, RADM Roger

Simpleman, COL Louis

Swiggum, George

Wilkinson, VADM Joseph, Jr.

Witter, RADM Raymond

Institutions:

Fleet Ballistic Missile Project Office
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Sea Systems Command
Office of the Chief of Naval Operations

Office of the Chief of Naval Research
Office of the Secretary of Defense
Office of the Secretary of the Navy
Research and Development Centers
Space and Naval Warfare Systems Command
Special Projects Office

Subjects:

Acquisition
AEGIS program
Battleforce architecture and engineering
Defense Management Review
Director of Navy Laboratories
Disestablishment of NAVMAT
Electronic warfare
Establishment of SPAWAR
Force-pervasive
Interface document requirement

Line management responsibility
Navy Industrial Fund
Operational requirement
Platform specific
Program Objectives Memorandum (POM) 88
Research and development
Top-level warfare requirements
Ultra-high frequency (UHF) follow-on program
Warfare systems architecture and engineering

DOOLITTLE, CAPT JAMES

Interviewer: Leroy L. Doig, III

Date of Interview: January 10, 1982

Documentation: Tapes, transcript

Abstract: Interview includes perceptions of NWC and its mission; character of airfield and problems with it being no longer a command; military-civilian relationships.

Repositories: NWC

Institutions:

Naval Weapons Center

Subjects:

Naval Weapons Center

DORMAN, RADM CRAIG

Interviewer: Dr. Joseph Marchese

Date of Interview: March 6, 1990

Documentation: 1 tape, 18 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Dorman initially describes his responsibilities in the Office of the Chief of Naval Operations and his role upon going to SPAWAR. He also provides

information regarding the role of PME-124 vis-a-vis SPAWAR's Space and Sensors Systems Directorate, PD 40, and the ASW Programs Directorate, PD 80. RADM Dorman discusses his additional duty as ASW architect and the relationship between SPAWAR in its WSA&E function and the other systems commands. He also elaborates on SPAWAR's funding problems for WSA&E and the problems SPAWAR encountered from top management levels regarding its authority in ASW and WSA&E. RADM Dorman provides insight into changes in PD 80 incorporated under RADM Raymond Witter as well as a review of accomplishments in PD 80 during RADM Dorman's watch.

Repositories: DTRC

Individuals Mentioned:

Baggett, VADM Lee
Carlson, RADM William
Chapman, Richard
Clark, VADM Glenwood
Fabian, Larry
Hogg, ADM James
Lehman, John
Madden, CAPT Lewis

McNamara, Robert S.
Paisley, Melvyn
Sinsky, Joel
Trost, ADM Carlisle
Whitman, Edward
Witter, RADM Raymond
Wolkensdorfer, RADM Daniel

Institutions:

Defense Science Board
Department of Defense
Naval Electronic Systems Command
Naval Material Command
Naval Sea Systems Command

Naval Underwater Systems Center
Office of the Chief of Naval Operations
Office of the Secretary of Defense
Space and Naval Warfare Systems Command
Woods Hole Oceanographic Institute

Subjects:

Antisubmarine warfare (ASW)
Aspin Report
Command control, and communication
Coopers and Lybrand Study
Defense Science Board
Disestablishment of NAVMAT
Establishment of SPAWAR

Funding of ASW and WSA&E
Integrated undersea surveillance system
Planning, programming, budgeting system
Research and development centers
Walker-Whitworth spy case

DRUMMETER, DR. LOUIS F.

Interviewer: Dr. David K. Allison

Date of Interview: December 20, 1979 and January 14, 18, 1980

Documentation: 6 tapes

Abstract: Dr. Drummeter gives his perspective on NRL optic tests and on organization and management of NRL research programs. Drummeter played a key role in the development of NRL's programs in optical science and technology, in particular optical radiometry, quantum optics, and high-energy lasers. The interviews are supplemented by a collection of papers.

Repositories: NRL

Institutions:

Naval Research Laboratory

Subjects:

High-energy laser

Optical radar

Radiometry

Other Entries:

Quantum optics

DUNCAN, ADM DONALD

Interviewer: Unknown

Date of Interview: 1964

Documentation: 981 page transcript

Abstract: ADM Duncan reminisces about his education at the University of Michigan and the Naval Academy, his service in World War I and early Naval aviation, his experience in ordnance and communications, work in the BUAER Plans Division, and his involvement in the Manhattan Project and NACA.

Repositories: COL, NHC

Institutions:

Bureau of Aeronautics

National Advisory Committee on Aeronautics

Subjects:

Aeronautics

Communications

Missiles

Ordnance

Other Entries:

Manhattan Project

Naval aviation

DUNCAN, CAPT JAMES

Interviewer: Albert B. Christman

Date of Interview: April 26, 1966

Documentation: 61 page transcript, index

Abstract: CAPT Duncan describes the building and equipping of NOTS in Inyokern, CA. He discusses how Prof. Michelson came to work there, Dr. Louis T. E. Thompson's influence, and CAPT Burroughs' tenure as commanding officer.

Repositories: NWC, DTRC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Byrnes, CAPT James
Hayward, ADM John T.

McLean, Dr. William B.
Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station
Naval Proving Ground

Subjects:

Naval Ordnance Test Station

DUNCOMBE, RAY AND JULIE

Interviewer: Steven J. Dick and Leroy Doggett

Date of Interview: June 18, 1983 and January 11, 1988

Documentation: Tapes, 64 page transcript

Abstract: The Duncombes describe their years as astronomers at the Naval Observatory c. 1942-1974. Mr. Duncombe was Director of the Nautical Almanac Office during part of this time.

Repositories: USNO

Subjects:

Astronomy
Nautical Almanac Office

DUNLAP, JACK

Interviewer: Unknown

Date of Interview: October 1972

Documentation: 32 page transcript

Abstract: Mr. Dunlap was a member of the civilian steering committee for Polaris. This is one of a series of seven interviews on the concept and development of the Polaris program conducted by the U.S. Naval Institute Oral History Program.

Repositories: NHC, NWCM, USNA, USNI

Subjects:

Ballistic missile submarines
Fleet ballistic missiles
Nuclear missiles

Nuclear powered fleet ballistic
missile submarines
Submarine launched ballistic missiles
Weapons systems

Other Entries:
Polaris program

EBAUGH, PAUL

Interviewer: Richard D. Glasow

Date of Interview: July 15, 1980

Documentation: Tapes, transcript

Abstract: Mr. Ebaugh describes his background and education, his work with the Harvard Underwater Sound Laboratory, and the Applied Research Laboratory.

Repositories: NUM

Institutions:

Applied Research Laboratory/Pennsylvania State University

Harvard University/Underwater Sound Laboratory

Ordnance Research Laboratory/Pennsylvania State University

Other Entries:

Acoustics research

Ordnance research

EBBERT, CAPT EDWIN L.

Interviewer: Dr. John A. S. Pitts

Date of Interview: June 22, 1982

Documentation: 2 tapes, index

Abstract: CAPT Ebbert discusses NRL's Commanding Officers and Technical Directors and reflects upon the problems involved when translating Navy operational needs into R&D programs.

Repositories: NRL

Institutions:

Naval Research Laboratory

Subjects:

Commanding Officers

Operational requirement

Research and development

Technical directors

EDMONDO, ELIZABETH

Interviewer: Dean Bundy

Date of Interview: August 10, 1985

Documentation: 1 tape

Abstract: Mrs. Edmondo was secretary to Dr. Robert Goddard, 1942 to 1945, at the Naval Engineering Experimental Station and Testing Laboratory, Annapolis. Goddard's personality, work habits, health and attitudes are recounted, along with Mrs. Edmondo's impressions of other personages at the lab in the WWII era, especially of CAPT Truax, for whom she also did some work. Mrs. Edmondo also recounts Goddard's troubles with funding, his staff and its attitudes toward the Navy environment, the Navy's attitude toward Goddard's work, security measures, and safety measures during rocket testing.

Repositories: DTRC

Individuals Mentioned:

Goddard, Dr. Robert
Gore, CAPT William
Truax, CAPT Robert

Institutions:

Bureau of Aeronautics
Naval Engineering Experimental Station and
Testing Laboratory, Annapolis

Subjects:

Funding	Rocket testing
Goddard, Dr. Robert	Variable thrust rocket engines
Jet-assisted take off	

EKAS, RADM CLAUDE P.

Interviewer: CAPT Robert L. Hansen

Date of Interview: 1975

Documentation: 1 tape, 42 page transcript, index

Abstract: RADM Ekas discusses the project history of the Harpoon missile, NAVAIR-NAVORD cooperation on the project, and communication between the Harpoon Program Managers and the technical workers involved. He talks about the problems of coordination between the SYSCOM commander, CNM, and CNO. He also comments on major trends in Navy R&D, including SARS, SYSCOM and CNM methods of program management, and cradle-to-grave technical continuity.

Repositories: NHC, DTRC

Individuals Mentioned:

McNamara, Robert S.

Institutions:

Bureau of Aeronautics
Bureau of Ordnance

Other Entries:

Harpoon missile project
Program management
Selected acquisition reporting system

ELLIS, DR. EMORY L.

Interviewer: Albert B. Christman

Date of Interview: May 1968

Documentation: 43 page transcript, index

Abstract: Dr. Ellis describes his own background as a biochemist at CalTech, his assignment to Eaton Canyon, and his experiences at Goldstone Lake. He discusses how he came to be at NOTS, the first rocket tests there, and the camp's facilities. Ellis comments on the establishment of NOTS, the location of the lab, its military direction, and its transition to a civil service operation.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
McClaren, CDR

Institutions:

California Institute of Technology
Naval Ordnance Test Station

Subjects:

Naval Ordnance Test Station
Rocket research

ELLIS, DR. EMORY L.

ELLIS, MARION

Interviewer: Albert B. Christman

Date of Interview: February 23, 1971

Documentation: 74 page transcript, index

Abstract: Dr. & Mrs. Ellis discuss the CalTech Rocketry Program, early rocketry work at NOTS, the creation of the test facilities, and the NOTS community. The Ellises reminisce about many individuals involved in the program, both military and civilian, and reflect on the general atmosphere and working environment of NOTS.

Repositories: DTRC

Institutions:

Bureau of Ordnance
California Institute of Technology
Naval Ordnance Test Station

Subjects:

Impact of civil service rating
Military-civilian relationships
Missile research

Naval Ordnance Test Station
Rolling Airframe Missile (RAM)
Working conditions

ELLIS, DR. EMORY L.
ELLIS, MARION

Interviewer: J. D. Gerrard-Gough

Date of Interview: November 1972

Documentation: 31 page transcript, index

Abstract: Dr. and Mrs. Ellis discuss the transfer of management at NOTS from CalTech to the Navy in late 1944, the problem of military-civilian relationships, and the command of CAPT Sykes. They talk about NOTS' principles of operation and the turnover in personnel. The Ellises comment on the work of Dr. Louis T. E. Thompson, facilities at NOTS, and research on submarine guns and rockets. They also describe living conditions at China Lake and the White Star Mine.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Armitage, LT John M.
Beckmann, CAPT Alcorn G.
Burroughs, RADM Sherman E.
Hayward, ADM John T.

Hussey, VADM George F.
Lauritsen, Dr. Charles C.
Sykes, RADM James B.
Thompson, Dr. Louis T. E.

Institutions:

California Institute of Technology
Naval Ordnance Test Station

Subjects:

Naval Ordnance Test Station
Rocket research

Sykes, RADM James B.
Thompson, Dr. Louis T. E.

ENOS, CAPT RALPH

Interviewer: Dr. Joseph Marchese

Date of Interview: July 14, 1989

Documentation: 2 tapes

Abstract: This interview is one of a series conducted to gather material for a history of the development of the MK 48 Torpedo. Enos gives a brief overview of his career, concentrating on the time he spent in the MK 48

Program Office at NAVSEA, 1971-77. The post-WWII development of torpedoes is discussed at some length as a background to the MK 48 program, and Enos then discusses in detail the program during the time he was personally involved. Enos talks about the various changes made to the MK 48 in its development phases, including the decision to develop the torpedo for the dual role as both antiship as well as antisubmarine, the decision to bring Clevite back in, the culmination of that decision in the Westinghouse versus Clevite shootout. Enos also discusses later changes made to the MK 48, the creation of the ADCAP program and the transfer of the work to the Naval Underwater Systems Center (NUSC) from NSWC. Also addressed are the relations between OPNAV (OP-02) with the program, the missions of the various R&D Centers, and a long list of other individuals who were involved with the MK 48 program.

Repositories: DTRC

Institutions:

Gould Corporation	Naval Surface Weapons Center
Naval Ocean Systems Center	Naval Underwater Systems Center
Naval Ordnance Systems Command	Office of the Chief of Naval Operations
Naval Ordnance Test Station/Pasadena	Ordnance Research Laboratory
Naval Sea Systems Command	Westinghouse Electric Company

Subjects:

Advanced Capability (ADCAP) Torpedo	Missions of the Navy laboratories
Advanced Lightweight Torpedo	Office of the Chief of Naval Operations
Competition among the Navy Laboratories	"Otto" fuel
Development of the Navy R&D Centers	Solid propellants
Fixed-price contracting	Torpedo development
Fusing systems	Warhead design
	Wire guidance

ENTWISTLE, RADM FREDERICK I.

Interviewer: Albert B. Christman

Date of Interview: March 1967

Documentation: 48 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. RADM Entwistle gives his impressions of RADM Parsons as a person and as an officer. He talks about the role of NOTS in the Navy and the role of scientists in the military. Entwistle also reflects on the contributions of Dr. Louis T. E. Thompson.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Parsons, RADM William S.	Thompson, Dr. Louis T. E.
Sage, Dr. Bruce	Tuве, Dr. Merle

Institutions:

California Institute of Technology	Naval Ordnance Test Station
General Tire and Rubber Co.	Naval Proving Ground

Subjects:

Manhattan Project
Parsons, RADM William S.

Proximity fuze
Thompson, Dr. Louis T. E.

ETHERIDGE, CAPT MELVIN R.

Interviewer: Leroy L. Doig, III

Date of Interview: September 23, 1983

Documentation: Tape, 28 page transcript, index

Abstract: Etheridge recalls his tour as Commander, NWC, which included the consolidation of the NWC China Lake and Corona activities following the 1 July 1967 creation of NWC (he arrived in September); he also discusses NWC contributions to the Fleet in Vietnam, the role of basic research and the need for discretionary funding, the position and selection of the Technical Director, military-civilian relationships, Center relations with Headquarters, and the infamous palm trees that appeared all over the base full grown one day and dead the next.

Repositories: NWC

Individuals Mentioned:

Amlie, Dr. Thomas S.
McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Laboratory
Naval Weapons Center

Other Entries:

Basic research
Laboratory consolidations
Military-civilian relationships

Technical directors
Vietnam war, laboratory support

EYSTER, DR. EUGENE H.

Interviewer: Albert B. Christman

Date of Interview: January 1966

Documentation: 21 page transcript, index

Abstract: Dr. Eyster talks about the weapons produced at Los Alamos, their specifications, and the role of NOTS, Los Alamos, and the Burlington Plant. He discusses the full-scale development and manufacture of atomic weapons. Eyster also comments on the accomplishments of the Salt Wells Pilot Plant and the reasons for its existence.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Longwell, Paul
Sage, Dr. Bruce

Institutions:

Naval Ordnance Test Station
Salt Wells pilot plant

Other Entries:

Atomic weapons
Manhattan Project
Salt Wells pilot plant

FALLGATTER, CALVIN J.

Interviewer: Carolyn Ogilvie

Date of Interview: October 6, 1976

Documentation: 33 page transcript, index

Abstract: Mr. Fallgatter comments on housing problems when NOTS opened. He talks about factors in employee turnover and discusses NOTS' first commanders.

Repositories: NWC, DTRC

Individuals Mentioned:

Etheridge, CAPT Melvin R.
McLaughlin, Jack
Richmond, CDR John

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Naval Ordnance Test Station

FARLEY, FRANK

Interviewer: Dr. Joseph Marchese

Date of Interview: July 24, 1989

Documentation: 2 tapes

Abstract: This interview is one of a series conducted to gather information for a history of the development of the MK 48 torpedo. Farley gives a description of his background and career, concentrating on his work in testing and evaluation at NSWC, especially on the MK 48 torpedo program. Specifically, Farley discusses the genesis of the Clevite version of the MK 48, the selection of NSWC to be the technical director for that version, the work done at NSWC on the warhead and homing system, and ironing out the problems such as the noise of the swashplate engine, the conversion of the

Westinghouse warhead to the antiship role, and later improvements made to the MK 48 after the granting of the contract. Farley gives a very detailed account of the famous shootout at Cape Canaveral between the Westinghouse and Clevite designs.

Repositories: DTRC

Institutions:

Applied Research Laboratory/Pennsylvania State University	Naval Sea Systems Command
Clevite Corporation	Naval Underwater Systems Center
Naval Ordnance Laboratory/Naval Surface Warfare Center	Westinghouse Electric Company

Subjects:

Fixed-price contracting	Technology development
Flow noise	Testing & evaluation
Homing systems	Torpedo ejection
Propulsion systems	Torpedo exploders
Swashplate engine	Torpedo warheads

FERGUSON, MARY

Interviewer: Susan Frutkin

Date of Interview: July 5, 1974

Documentation: 1 tape, index

Abstract: This interview is a taped review of a document on Navy financial management put together for Booz-Allen & Hamilton's review of Navy R&D Management 1946-1973. Mrs. Ferguson discusses the effect of the National Security Acts of 1947 and 1949 on the budget process, relationships between the Comptroller of the Office of Naval Research (ONR) and the Department of Defense (DOD), how funding changes created the program planning process, who controls appropriations, and difficulties for women in the military establishment.

Repositories: NHC, DTRC

Individuals Mentioned:

Bennett, RADM Rawson
Livermore, Cliff

Institutions:

Office of Naval Research
Office of the Comptroller of the Navy

Other Entries:

Department of Defense	Office of Chief of Naval Research
Fiscal management	Research and development funding
Franke Board	Sexual discrimination
National Security Act	

Subjects:

Armed Forces Qualification Test
"Centers of Excellence"
Laboratory management

Laboratory organization
Personnel research

FITZPATRICK, WILLIAM

Interviewer: Unknown

Date of Interview: 1978

Documentation: 1 tape

Abstract: Fitzpatrick details his years at the Newport laboratory, beginning with the work on captured German and Japanese torpedoes during and immediately after WWII up to and including the merger with the Navy Underwater Sound Laboratory, New London in 1970. Much of the work at Newport in the early days was cut and dry rather than truly experimental. After the war, the Central Torpedo Office, Newport became more involved in R&D rather than in production, and became an increasingly professional operation. The merger with New London was perceived as beneficial, though it had a negative impact on morale at first. The interview concludes with a discussion of the positive and negative aspects of contracting out work, and whether it leads to a loss of in-house capabilities and thus raison d'etre of the center. NOTE: The quality of this recording is not very good.

Repositories: DTRC

Institutions:

Central Torpedo Office
Naval Torpedo Station, Newport
Naval Underwater Ordnance Station,
Newport

Naval Underwater Sound Laboratory, New
London
Naval Underwater Systems Center
Naval Underwater Weapons Research and
Engineering Station, Newport

Subjects:

Contracting out
Laboratory management
Naval Underwater Sound Laboratory,
New London

Torpedo development
Torpedo fuels

FOLADARE, DR. JOSEPH

Interviewer: Albert B. Christman

Date of Interview: February 20, 1970

Documentation: 22 page transcript, index

Abstract: Dr. Foladare discusses the early history of CalTech in Naval research and the key people involved in it at the start of World War II. He talks about the tests at Goldstone Lake and Eaton Canyon, the spirit of the CalTech people working in weapons research, and the budgeting and documentation of various programs at NOTS.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Fowler, Dr. William	Potter, Russell
Gardner, Trevor	Sage, Dr. Bruce
Lauritsen, Dr. Charles C.	Watson, Dr. Earnest C.
Millikan, Dr. Robert A.	Winger, Dr. Ralph

Institutions:

California Institute of Technology
Naval Ordnance Test Station

Subjects:

Budget
California Institute of Technology
Weapons research

FORSTER, ROBERT H.

Interviewer: Leroy L. Doig, III

Date of Interview: January 15, 16, 1987

Documentation: Tapes, 219 page transcript

Abstract: Mr. Forster discusses his work at China Lake in bomb directors and aircraft and then in special-warfare systems, primarily in support of SEAL team requirements during the Vietnam war. Forster's group at NWC was responsible for a wide variety of special weapons, swimmer weapons, covert devices, and operational support to the Navy, Marine Corps, and other Government agencies. The annex is a monologue provided by Mr. Forster to give details on certain devices and is keyed to a collection of photographs of those devices. ACCESS VERY LIMITED

Repositories: NWC

Institutions:

Naval Coastal Systems Center	Naval Weapons Center
Naval Ocean Systems Center	United States Marine Corps
Naval Surface Warfare Center	

Other Entries:

Intelligence operations	Swimmer weapons
SEAL teams	Vietnam war, laboratory support
Special warfare	

FOWLER, VADM EARL

Interviewer: Dr. Joseph Marchese

Date of Interview: May 17, 1990

Documentation: 1 tape, 29 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. VADM Fowler initially discusses NAVELEX's effectiveness in acquisition and integration, and the steps taken to improve NAVELEX's acquisition process. The subject of systems integration is addressed next, and VADM Fowler offers examples of NAVELEX's efforts to improve integration. VADM Fowler was not directly involved with the 1981 reorganization of NAVELEX and so does not comment on that topic, but he does present opinions on reorganizations in general. A discourse on NAVMAT's effectiveness and the reasons for its disestablishment follows. VADM Fowler then discusses the complex issues regarding the decision to create SPAWAR, and offers opinions on the type of commander required to deal effectively with a reinvigorated NAVELEX that carries the additional responsibility of warfare systems architecture and engineering. Finally, he discusses the best administrative arrangements for research and development centers.

Repositories: DTRC

Individuals Mentioned:

Arnold, RADM Henry
Holloway, ADM James L
Kidd, ADM Isaac C., Jr.
Lawson, Jay
Lehman, John
Nagler, VADM Gordon

Paisley, Melvyn
Schick, RADM George
Schneider, RADM Raymond
Watkins, ADM James
Weisner, ADM Maurice

Institutions:

Department of Defense
National Aeronautic and Space
Administration
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Naval Ships Systems Command
Space and Naval Warfare Systems Command
Special Projects Office
Strategic Systems Project Office
Telecommunications Command

Subjects:

Apollo Program
Communications
Disestablishment of NAVMAT
Establishment of SPAWAR
Mavaguez incident

Naval Electronic Systems Command
Research and development
Warfare systems architecture and
engineering

FWLER, DR. WILLIAM

Interviewer: Albert B. Christman

Date of Interview: 1969

Documentation: 45 page transcript. index

Abstract: Dr. Fowler discusses his work before he came to NOTS at the Naval Proving Ground and on the National Defense Research Committee. He talks about the need for rocket research, the CalTech research organization, and the necessity of a West Coast research facility. Fowler describes rocket work at the Goldstone Lake Range and the start of NOTS.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Bowen, Ike
Burroughs, RADM Sherman E.
Ellis, Dr. Emory L.
Hickman, Dr. Roy Scott
Lauritsen, Dr. Charles C.

Lauritsen, Dr. Thomas
Renard, RADM Jack C.
Sage, Dr. Bruce
Skinner, COL

Institutions:

California Institute of Technology
National Defense Research Committee

Naval Ordnance Test Station
Naval Proving Ground

Subjects:

California Institute of Technology
Naval Ordnance Test Station
Rocket research

FREEDMAN, ROBERT

Interviewer: Leroy L. Doig, III

Date of Interview: August 18, 1987

Documentation: Tapes, videotapes, 67 page transcript

Abstract: This interview is one of a group conducted to support the development on an archival unit on the A-7 support activity at NWC and the preparation of the document, *What Have You Done For the Fleet Today? A Brief History of the A-7E Weapon System Support Activity* (NWC AdPub 391). Mr. Freedman discusses the origins of the A-7 aircraft and of its software and avionics support program at China Lake, the major accomplishments of that program, the people involved in it, and the philosophy of its management (by Freedman). Relationships with contractors and with sponsors, the growth of digital systems, the evolution of software, the establishment of a team, the development of support facilities, the requirement for responsiveness, and the fielding of a product are major topics. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Birdwell, CAPT Carl
Chartier, Woodrow
Clinton, CAPT John
Doss, CAPT Robert

Gallagher, CAPT Tom
Harris, Hermalene
Seymour, VADM E. R.

Institutions:

Naval Air Station, Lemoore
Naval Air Systems Command
Naval Air Test Center
Naval Weapons Center

Pacific Missile Test Center
Test and Development Squadron 4 (VX-4)
Test and Development Squadron 5 (VX-5)
Vought/LTV Corporation

Other Entries:

Avionics
Fleet support
Mission-support systems

Software development and support
Vietnam war, laboratory support

FRESH, J. NORMAN

Interviewer: Dr. David K. Allison

Date of Interview: May 1, 1984

Documentation: 3 tapes, index

Abstract: Mr. Fresh reminisces about the history of, and his career with DTNSRDC. He describes the difficulties and political maneuvering involved in getting new wind tunnels at the Carderock laboratory; airflow tests on buildings and bridges, and designs for rigid airships in the old tunnel in the Washington Navy Yard. He talks of coworkers, famed aeronautical engineers, and work on advanced naval vehicles, DTMB's relationship with BUAER, and CAPT Harold Saunders tenure as Commanding Officer. Additional information on the Aerodynamics Laboratory may be found in Mr. Fresh's publication The Aerodynamics Laboratory (The First 50 Years), DTMB Aero Report 1070, January 1964.

Repositories: DTRC

Individuals Mentioned:

Chaplin, Dr. Harvey R.
Diehl, CAPT Walter S.
Keil, Dr. Alfred H.
McCrary, John A.
Richardson, CAPT Holden C.

Santos, Dr. Socrates de los
Saunders, CAPT Harold E.
Truscott, Starr
Zahm, Dr. Albert F.

Institutions:

Bureau of Aeronautics
Bureau of Construction and Repair
Bureau of Ships
David Taylor Model Basin
David Taylor Naval Ship Research and
Development Center

Experimental Model Basin
National Advisory Committee on
Aeronautics
Naval Air Development Center

Subjects:

Aerodynamics
David Taylor Naval Ship Research and
Development Center

Hydrodynamics
Saunders, CAPT Harold E.

Other Entries:

Air cushion vehicles
Model testing

Vertical take off and landing aircraft
Wind tunnels

FRIEDMAN, DR. HERBERT

Interviewer: Richard Hirsh

Date of Interview: 1980

Documentation: Tapes

Repositories: AIP

Subjects:
Astronomy

FRIEDMAN, DR. HERBERT

Interviewer: Dr. Martin Harwit

Date of Interview: June 7, 1983

Documentation: Tapes, 40 page transcript

Repositories: NASM

Subjects:
Astronomy

FRIEDMAN, DR. HERBERT

Interviewer: Dr. David H. DeVorkin

Date of Interview: September 2, 1983

Documentation: Tapes, 70 page transcript

Abstract: This interview begins with Friedman's switch from art to physics at Brooklyn College, and graduate work at Johns Hopkins. He details his work at NRL, including the Rocket-Sonde Group and Optics Group, the V-2 program, detecting solar x-rays, Aerobee and Rockoon experiments, solar spectroscopy, military applications of research, developing a model of the ionosphere, and the contributions of von Braun and Stuhlinger.

Repositories: NASM

Individuals Mentioned:

Braun, Wernher von
Franck, Dr. James
Kaiser, Herman F.

Lindsay, John
Stuhlinger, E.
Wood, R. W.

Institutions:

Johns Hopkins University
Naval Research Laboratory

Subjects:
Astrophysics
Optics

Physics
Satellites

Other Entries:
Aerobee rocket
Braun, Wernher von
Project Rainbarrel
Rocket-Sonde

Rockoon
Solar spectroscopy
Solar Radiation (SOLRAD) Program
V-2 Rocket

FRIEDMAN, SIDNEY

Interviewer: Roger Kempler

Date of Interview: June 3, 1982

Documentation: 16 page transcript, index

Abstract: Mr. Friedman discusses his contacts with NPRDC, Navy personnel research in general, and the positions he held in the Navy.

Repositories: DTRC, NPRDC

Individuals Mentioned:

Brundage, Dr. Everett G.
Collins, Dr. John

Price, D. George
Ramses, Dr. Eugene

Institutions:

Navy Personnel Research and Development Center

Other Entries:

Personnel research

FROSCH, DR. ROBERT A.

Interviewer: Dr. Vincent Ponko

Date of Interview: January 7, 1981

Documentation: 64 page transcript, index

Abstract: Dr. Frosch compares Navy and private laboratories in terms of flexibility, mission, size, and the effect of bureaucracy. He describes Advanced Research Project Agency (ARPA) work and comments on the role of the ASN (R&D), including his personnel management philosophy, control over channels of command and R&D Budget, and philosophical observations about the Navy R&D decision-making process. Frosch evaluates the first two DNL/DLP's and talks about his influence in selecting TD's and CO's. He describes budget problems, the optimal CO-TD relationship, and McNamara and Laird's influences on Navy R&D.

Repositories: DTRC

Individuals Mentioned:

Chaffee, John
Connolly, VADM Thomas F.
Johnson, Dr. Gerald

Laird, Melvin
McNamara, Robert S.

Institutions:

Advanced Research Projects Agency
Office of Director of Navy Laboratories

Subjects:

Assistant Secretary of the Navy
(Research and Development)
Budget
Commanding officers

Director of Navy Laboratories
McNamara, Robert S.
Technical directors

FROSCH, DR. ROBERT A.

Interviewer: Dr. David H. DeVorkin

Date of Interview: July 10, 1981

Documentation: Tapes, 256 page transcript

Abstract: Dr. Frosch discusses his education, work and directorship of Hudson Laboratories, PERT, ocean floor modeling, the search for the *THRESHER*, his work at ARPA, his position as ASN, the Navy in Space and Naval R&D, SOLRAD and Navy satellites, the effect of the Mansfield Amendment and his decision to leave the Navy. Much of the interview deals with NASA, the Space Shuttle, and the Space Telescope.

Repositories: NASM

Individuals Mentioned:

Foley, Dr. Henry M.
Nitze, Paul

Press, Frank
Rabi, Isidor I.

Institutions:

Advanced Research Projects Agency
Bell Laboratories
Columbia University
Hudson Laboratories

NASA
Naval Research Laboratory
Woods Hole Oceanographic Institute

Subjects:

National Aeronautics and Space
Administration
Satellites

Seismology
Space astronomy

Other Entries:

Mansfield Amendment
Nuclear test detection
Ocean floor modeling
Program evaluation review technique
Project Artemis

Project Media
Project Vela
Research and development
USS THRESHER



LEFT TO RIGHT: DR. ROBERT A. FROSCH, ASSISTANT SECRETARY OF THE NAVY,
RESEARCH AND DEVELOPMENT; DR. R. E. GIBSON, DIRECTOR JOHNS HOPKINS
APPLIED PHYSICS LABORATORY; VICE PRESIDENT HUBERT H. HUMPHREY;
DR. RICHARD B. KERSHNER, PAUL R. IGNATIUS, SECRETARY OF THE NAVY;
REAR ADMIRAL LEVERING SMITH, USN, DIRECTOR SPECIAL PROJECTS OF
THE NAVAL MATERIAL COMMAND
19 OCTOBER 1967

FULLER, CLARISSA PARSONS

Interviewer: Albert B. Christman

Date of Interview: January 1967

Documentation: 106 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mrs. Fuller, RADM Parsons' sister, talks about the Parsons' move from Illinois to New Mexico, the Parsons' children's early schooling, and RADM Parsons' admission to the Naval Academy at Annapolis. She discusses her brother's role on the Manhattan Project and her contacts with him at the time. Also included are sections on the Proximity Fuze, Parsons' sea duty, and his flight to Hiroshima on the Enola Gay.

Repositories: NWC, DTRC

Individuals Mentioned:

Burroughs, Martha Parsons
Oppenheimer, Dr. Robert

Parsons, Critchell
Parsons, RADM William S.

Institutions:

U.S. Naval Academy

Subjects:

Manhattan Project
Parsons, RADM William S.
Proximity fuze

**FURTH, RADM FREDERICK R.
PRIORI, DR. E.**

Interviewer: Unknown

Date of Interview: July 23, 1974

Documentation: 3 tapes

Repositories: DTRC

GARRITSON, CAPT GRANT RICHARD

Interviewer: Dr. Joseph Marchese

Date of Interview: May 19, 1987

Documentation: 2 tapes, 49 page transcript, index

Abstract: CAPT Garritson discusses his education, military background, and assignment as Commander of the David Taylor Research Center. Garritson provides in-depth assessments of various DTRC technical programs and departments and the realignment that took place when the Center eliminated

redundancies between its Annapolis and Carderock activities. The larger role of DTRC in the Navy and the proper organization of R&D Centers is discussed in the final section of the interview. Garritson sees the role of Naval Officers in R&D Centers as providing fleet perspective to the centers and credibility of center output to the fleet.

Repositories: DTRC

Institutions:

David Taylor Research Center
Defense Advanced Research Projects
Agency
Naval Academy
Naval Material Command
Naval Postgraduate School

Naval Sea Systems Command
Philadelphia Naval Shipyards
Portsmouth Naval Shipyard
Space and Naval Warfare Systems Command
University of Notre Dame

Subjects:

600 ship Navy
Budget constraints
David Taylor Research Center
Director of Navy Laboratories
Foreign government work

Navy Industrial Fund
Research and development
Role of Navy laboratories
Ship design

GATES, THOMAS S.

Interviewer: Unknown

Date of Interview: September 1972

Documentation: 71 page transcript

Abstract: Thomas S. Gates was Secretary of the Navy during the development of Polaris. This is one of a series of seven interviews on concept and development of Polaris program conducted by the U.S. Naval Institute Oral History Program.

Repositories: NHC, NWCM, USNA, USNI

Institutions:

Office of the Secretary of the Navy

Subjects:

Ballistic missile submarines
Fleet ballistic missiles
Nuclear missiles
Nuclear powered fleet ballistic missile
submarines

Submarine launched ballistic missiles
Weapons systems

Other Entries:

Polaris program

GEBHARD, DR. LOUIS A.

Interviewer: Dr. David K. Allison

Date of Interview: September 12, 19, and October 3, 1977

Documentation: 6 tapes, transcript, index

Abstract: Dr. Gebhard discusses radio-electronic research in the Navy and at NRL from 1917-1977. Gebhard joined NRL in 1923 and his research resulted in more than 90 patents and significant advances in radar, radio communications, direction finding, and electronics.

Repositories: NRL

Institutions:
Naval Research Laboratory

Subjects:
Electronics
Radar
Radio communications

GIALLORENZI, DR. THOMAS G.

Interviewer: Dr. David K. Allison

Date of Interview: September 26, 1980

Documentation: 1 tape

Abstract: NRL pioneered in fiber optics research and has been the Navy's lead laboratory for the tri-service Fiber Optics Sensor System (FOSS) development program.

Repositories: NRL

Institutions:
Naval Research Laboratory

Subjects:
Fiber Optics

Other Entries:
Acoustics research
Fiber optic hydrophone
Fiber optics sensor system
Hydrophones

GLEITER, WERNER

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 8, 1982

Documentation: 1 tape, index

Abstract: Mr. Gleiter discusses his background, his service in the Navy in World War II, and how and why he came to NADC. He describes NADC sonobuoy research, the SSQ-15 Sonobuoy, cooperation between government and industry, and technical difficulties with sonobuoys. Gleiter talks about the Columbia University Sonobuoy and ASW programs, the rise of Air ASW, and NADC's relations with BUAER. He also mentions NADC's contacts with local universities.

Repositories: NADC, DTRC

Individuals Mentioned:

Howard, Jim
Krutter, Dr. Harry

Mason, Russell
Wallace, John D.

Institutions:

Bureau of Aeronautics
Columbia University
Naval Air Development Center

Standards and Calibration Laboratory
Underwater Sound Laboratory

Subjects:

Antisubmarine aircraft
Antisubmarine warfare (ASW)
Bureau of Aeronautics

Naval Air Development Center
Sonobuoys

Other Entries:

SSQ-15 Sonobuoy

GODDARD, MRS. ROBERT

Interviewer: Albert B. Christman

Date of Interview: January 28, 1971

Documentation: Notes, index

Abstract: This interview is recorded in note form and not intended for general use. Mrs. Goddard discusses Dr. Robert Goddard's disposition, his relationship with Navy officers, and the influence on him of Prof. Webster of Clark University. She comments on Goddard's rivals at CalTech and his relationship with Dr. Louis T. E. Thompson.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Karman, Dr. Theodore von
Thompson, Dr. Louis T. E.
Webster, Dr. A. G.

Institutions:

Naval Proving Ground

Subjects:

Goddard, Dr. Robert
Thompson, Dr. Louis T. E.

**GOSS, DR. WILBUR
PORTER, HENRY**

Interviewer: A. B. Christman

Date of Interview: May 4, 1966

Documentation: 40 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Goss and Porter discuss Parsons' personal attributes, his confidence in people, his ability to do a top-flight job, and his knack for working with other people. They also recall the planning, testing, and deployment in Europe and the Far East of the Proximity fuze.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Parsons, RADM William S.
Tuve, Dr. Merle

Subjects:

Parsons, RADM William S.
Proximity fuze

GOULD, GERALD

Interviewer: Unknown

Date of Interview: 1978

Documentation: 1 tape

Repositories: DTRC

GOULDMAN, HAROLD M., JR.

Interviewer: Cynthia Rouse

Date of Interview: July 27, 1976

Documentation: 14 page transcript

Abstract: This interview is Chapter IX of Dahlgren, edited by Kenneth G. McCollum. Mr. Gouldman, a lifelong resident of Dahlgren, discusses community relations, education for base children, facilities, and funding.

Repositories: NSWC

Institutions:

Naval Proving Ground
Naval Surface Weapons Center

Subjects:

Naval Surface Weapons Center

GRALLA, VADM ARTHUR R.

Interviewer: Vincent Ponko, Jr.

Date of Interview: November 4, 1980

Documentation: 2 tapes, 31 page transcript, index

Abstract: VADM Gralla describes his pre-1946 work in R&D, including torpedo research, time in CNO, a period as CO of the *USS NORTON*, and work in BUORD and BUWEPS. He discusses his tenure as the first head of the Naval Ordnance Systems Command: his opposition to the formation of DNL/DLP, his evaluation of Dr. Gerald Johnson as the first DNL/DLP, and the need for military control of the labs. Gralla questions the logic of placing the laboratories under the DNL and states that they should be placed under the Systems Commands. He adds that he would limit the power of the ASN (R&D) and the CNM, make the labs compete with private industry for work, and keep the labs from doing any more than pure research. Gralla details Naval Ordnance Systems Command operations, in particular, the funding process and the problems of the material Navy administratively and technically. He mentions some key people in Navy R&D-- Dr. William Raney, Dr. Joel Lawson, and SECNAV Paul Nitze.

Repositories: DTRC

Individuals Mentioned:

Frosch, Dr. Robert A.
Johnson, Dr. Gerald

Nitze, Paul
Raney, Dr. William

Institutions:

Bureau of Ordnance
Bureau of Weapons

Naval Material Command
Naval Ordnance Systems Command

Subjects:

Director of Navy Laboratories
Laboratory management

Naval Ordnance Systems Command
Torpedo development

GRANUM, RADM ALFRED M.

Interviewer: A. B. Christman

Date of Interview: January 1967

Documentation: 11 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. RADM Granum describes Parsons as a young Ensign under his command on the *USS IDAHO*. He talks about Parsons' practicality, common sense, moral courage, and leadership ability.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Blandy, ADM George
Parsons, RADM William S.

Subjects:

Parsons, RADM William S.

GRODSKY, JAMES

Interviewer: Booz, Allen and Hamilton

Date of Interview: January 22, 1975

Documentation: 1 tape

Abstract: Grodsky was a staff member of the Director of Defense Research and Engineering organization in the 1960s, and discusses the approach taken by OSD to systems acquisition in that period. Grodsky specifically addresses the use of Technical Development Papers, the genesis of Decision Coordinating Papers, the creation and activities of the Defense Systems Acquisition Review Council, and the concept and actualization of the Concept Formulation/Contract Definition process. Also addressed are contract definition in the broad sense, the tendency for services to advocate their own systems at the expense of others, and the need for honest presentation of options to the Secretary of Defense (SECDEF).

Repositories: DTRC

Individuals Mentioned:

McNamara, Robert S.
Waterman, Dr. Peter

Institutions:

Defense Systems Acquisitions Review Council
Director of Defense Research and Engineering
Office of the Secretary of Defense

Subjects:

Concept formulation/contract definition	Technical development papers
Contract definition process	Total package procurement
Decision coordinating paper	

GROVES, LTG LESLIE

Interviewer: Albert B. Christman

Date of Interview: May 1967

Documentation: 55 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. LTG Groves discusses in detail RADM (then CAPT) Parsons' role in the Manhattan Project from Los Alamos to Alamogordo to Tinian and Hiroshima. He also recalls the dropping of the Nagasaki bomb; in particular, the role of ADM (then CAPT) F. L. Ashworth. Groves talks about military-scientific relations today and during the Manhattan Project.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Ashworth, VADM Frederick L.
Oppenheimer, Dr. Robert

Purnell, RADM William R.
Tibbets, COL Paul

Institutions:

Naval Ordnance Test Station

Subjects:

Ashworth, CAPT E. L.
Manhattan Project
Parsons, RADM William S.

GUNN, DR. ROSS

Interviewer: Albert B. Christman

Date of Interview: May 1966

Documentation: 10 pages of notes, index

Abstract: Since this interview was not taped, the transcript consists of recollections of the interviewer. Mr. Christman lists what Dr. Gunn said about RADM William S. Parsons and what he believes Gunn's emotions were at the time of the Manhattan Project. He includes Gunn's opinion on the radar research that Parsons conducted at NRL, the Bureau of Ordnance's reaction to the work, and discusses Parsons' role in the Manhattan Project. Christman also inserts a memo written by Dr. Gunn on the feasibility of nuclear powered submarines.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Parsons, RADM William S.

Institutions:

Bureau of Ordnance
Naval Research Laboratory

Other Entries:

Atomic submarine research
Manhattan Project
Parsons, RADM William S.
Radar research

GUTHRIE, DR. ROBERT C.

Interviewer: Dr. David K. Allison

Date of Interview: April 13, 1978

Documentation: 3 tapes, index

Abstract: Dr. Guthrie talks about the development of radar at NRL, the first major demonstration of the 28 megacycle equipment in 1936, the installation of an experimental 200 megacycle set in the *USS LEARY*, the comparison of British and American radar work in the 1930's, and independence from the research of the U.S. Army, the Tizard Mission, NDRC, AEW development in conjunction with the Naval Air Modification Unit, and NRL Research Management.

Repositories: NRL

Institutions:

National Defense Research Committee
Naval Air Modification Unit
Naval Research Laboratory

Radio Corporation of America
U.S. Army Signal Corps

Subjects:

National Defense Research Committee
Radar
Radio transmitters

Other Entries:

Airborne early warning systems
Radar research

Tizard Mission
USS LEARY

HABICHT, FRANK

Interviewer: Albert B. Christman

Date of Interview: May 1967

Documentation: 54 page transcript, index

Abstract: Mr. Habicht describes Army rocket tests at Elgin Field in late 1942 and early 1943 and the first American use of rockets in combat. He talks about his arrival at NOTS, his position as Administrative Assistant under CAPT Burroughs, and the leadership at NOTS and in the Bureau of Ordnance. He discusses problems at NOTS, including those of construction and discipline and how NOTS received its funds.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Hayward, ADM John T.
Parsons, RADM William S.

Richmond, CDR John
Vieweg, RADM Walter V. R.

Institutions:

Naval Ordnance Test Station
U.S. Army Bureau of Ordnance

Subjects:

Naval Ordnance Test Station
Rocket research

HAFF, CAPT WILLIAM B.

Interviewer: Leroy L. Doig, III

Date of Interview: June 24, 1981

Documentation: 33 page transcript

Abstract: CAPT Haff explains the changes in the character of air-to-air combat, including new weapons and electronic warfare. He discusses the future of NWC, the place of Navy labs versus that of the contractor in R&D, and relations with contractors and people in Washington. Haff comments on military-civilian relationships at NWC and lab responses to Fleet needs. He talks about NWC's top management, his philosophy on RDT&E, and NWC as a command.

Repositories: NWC, DTRC, NHC

Institutions:

Naval Weapons Center

Other Entries:

Electronic warfare
Military-civilian relationships
Research, development, test, and evaluation

HAFSTAD, DR. LAWRENCE R.

Interviewer: Albert B. Christman

Date of Interview: February 1971

Documentation: 21 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Hafstad discusses his early contacts with Parsons at NRL, their early atomic work, and the proximity fuze. He talks about Parsons' leadership and technical ability on the proximity fuze project, the influence of Dr. Charles C. Lauritsen on Parsons, and Lewis Strauss' role as Navy Financial Advisor.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Lauritsen, Dr. Charles C.
Strauss, RADM Louis L.
Tuve, Dr. Merle

Institutions:

Naval Research Laboratory

Subjects:

Lauritsen, Dr. Charles C.
Parsons, RADM William S.
Radar

Other Entries:

Proximity fuze

HALL, JAMES
HOYEM, JOHN
SEELEY, RICHARD

Interviewer: Leroy L. Doig, III

Date of Interview: December 1987

Documentation: Tapes, videotapes, 31 page transcript

Abstract: This interview is one of a group conducted to support the development of an archival unit on the A-7 support activity at NWC and the preparation of the document, *What Have You Done For the Fleet Today? A Brief History of the A-7E Weapon System Support Activity* (NWC AdPub 391). Hall, Hoyem, and Seeley discuss the origins of the A-7 aircraft software and avionics support program at China Lake, the major accomplishments of that program, the people involved in it, and the philosophy of its management. Relationships with contractors and with sponsors, the growth of digital systems, the evolution of software, the establishment of a team, the development of support facilities, the requirement for responsiveness, and the fielding of a product are major topics. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Birdwell, CAPT Carl
Chartier, Woodrow
Clinton, CAPT John
Doss, CAPT Robert

Freedman, Robert
Gallagher, CAPT Tom
Seymour, VADM E. R.

Institutions:

Naval Air Station, Lemoore
Naval Air Systems Command
Naval Air Test Center
Naval Weapons Center

Pacific Missile Test Center
Test and Development Squadron (VX-4)
Test and Development Squadron (VX-5)
Vought/LTV Corporation

Other Entries:

Avionics
Fleet support
Mission-support systems

Software development and support
Vietnam war, laboratory support

HALL, DR. JOHN L.

Interviewer: Dr. David H. DeVorkin

Date of Interview: February 21, 1979

Documentation: Tapes, 29 page transcript

Abstract: Dr. Hall speaks about his family background and education, early contacts and interests in photoelectric photometry, red sensitive cell photometry, work at the Radiation Laboratory at MIT during World War II, research at the Naval Observatory, and co-discovery of interstellar polarization.

Repositories: AIP

Institutions:

Massachusetts Institute of Technology
Naval Observatory

Subjects:

Astronomy
Interstellar polarization

Other Entries:

Photoelectric photometry

HALL, DR. JOHN

Interviewer: Steven J. Dick

Date of Interview: April 4, 1983

Documentation: Tapes, 29 page transcript

Abstract: Dr. Hall discusses his career at Columbia (1933-34) and Swarthmore (1934-38), Amherst and MIT Radiation Laboratory (1938-48), and the U.S. Naval Observatory (1948-58), with brief comments on his years as Director of Lowell Observatory (1958-77).

Repositories: USNO

Subjects:

Astronomy

HAMM, MAURICE

Interviewer: M. P. Barnes

Date of Interview: November 17, 1982

Documentation: Tapes

Abstract: Mr. Hamm discusses the Airfield and its operations.

Repositories: NWC

Institutions:
Naval Weapons Center

Other Entries:
Test and evaluation

HARDY, CAPT JOHN I.

Interviewer: Albert B. Christman

Date of Interview: February 13, 1967

Documentation: 39 page transcript, index

Abstract: CAPT Hardy explains how his Navy background helped him during two tours, one as CO of NOTS. He discusses the role of NOTS as both a quick fix for the Fleet and a long-term R&D Center. Hardy talks about the community surrounding the Center and the support NOTS gets from the Navy Department in Washington.

Repositories: NWC, DTRC, NHC

Institutions:
Naval Ordnance Test Station
Naval Weapons Center

Subjects:
Naval Ordnance Test Station
Naval research

HARTMANN, DR. GREGORY

Interviewer: Susan Frutkin and CAPT Robert L. Hansen

Date of Interview: October 15, 1974

Documentation: 6 tapes, 149 page transcript, index

Abstract: In this extensive and broad ranging interview, Dr. Hartmann recalls a few specific experiments he was involved in, including the Bikini bomb tests. He talks about BUORD's mine and torpedo work, the establishment of NOL, and the Naval Gun Factory and magnetic mines. He talks about R&D in

DUORD, particularly the mission of NOL, NPG at Dahlgren, VA, and Atomic Energy Commission work at NOL. Hartmann comments on laboratory management, the distinction between the CO and TD, the Bureaus' attempts to create a lab management office, laboratory-SYSCOM dialogues, and the Research and Development Board. He discusses Dr. Chalmers Sherwin's opinions of lab project management, DDR&E's drive to improve the labs, and examples of aborted R&D projects.

Repositories: NHC, DTRC

Individuals Mentioned:

Bennett, Dr. Ralph
Foster, Dr. John S.
Frosch, Dr. Robert A.
Johnson, Dr. Gerald
McLean, Dr. William B.

McNamara, Robert S.
Raborn, RADM William F.
Rothman, Dr. Samuel
Sherwin, Dr. Chalmers

Institutions:

Atomic Energy Commission
Bureau of Ordnance
Naval Electronics Laboratory
Naval Ordnance Laboratory

Office of Director of Defense Research
and Engineering
Office of Director of Navy Laboratories
Systems commands

Subjects:

Antivehicle weapons
Atomic Energy Commission
Bikini tests
Commanding officers
Director of Defense Research and
Engineering

Laboratory management
Limpet weapons
Naval Mine Warfare
Naval Ordnance Laboratory
Technical directors

Other Entries:

Navy Industrial Fund
Operation Crossroads

Project REFLEX
Submarine Rocket (SUBROC)

HARTMANN, DR. GREGORY

Interviewer: Dr. Joseph Marchese

Date of Interview: July 27, 1989

Documentation: 2 tapes

Abstract: Dr. Hartmann was involved with the development of explosives and torpedoes beginning during WWII and was Technical Director of the Naval Ordnance Laboratory, White Oak between 1956 and 1973. The interview focuses on the detailed history of the improvement of the unreliable torpedoes of WWII by NOL under the old Bureau of Ordnance, the creation of the first homing torpedo, the "Mine" Mk 25, the introduction of feasibility studies, the effect of the McNamara reforms and the early development of the MK 48 torpedo, with particular emphasis on NOL's involvement. Hartmann also comments on bureaucratic disputes and difficulties in Navy R&D, competition among the Navy's R&D Centers, and the difficulties inherent in "fixed-cost" contracting.

Repositories: DTRC

Institutions:

Applied Physics Laboratory/University of Washington	Naval Ordnance Laboratory/Naval Surface Warfare Center
Bureau of Ordnance	Naval Undersea Systems Center
Chief of Naval Operations	Naval Weapons Center
National Defense Research Council	Ordnance Research Laboratory/
Naval Gun Factory	Pennsylvania State University

Subjects:

Engineering design	Project management
Explosives	Propulsion systems
Fixed-cost contracting	Research management
Homing systems	Responsiveness of Navy laboratories
Nuclear testing	Torpedo development

HARWIT, DR. MARTIN
KONDRACKI, HENRY

Interviewer: Dr. David H. DeVorkin

Date of Interview: February 9, 1983

Documentation: Tapes, 67 page transcript

Abstract: This double interview with Kondracki and Harwit centers on their work in the design and construction of an infrared Aerobee rocket payload, and includes discussion of other rocket groups at NRL, use of Atlas missiles, and NASA's doubts about helium-cooled payloads.

Repositories: NASM

Institutions:

Cornell University
National Aeronautics and Space Administration
Naval Research Laboratory

Subjects:

Astronomy

Other Entries:

Aerobee rocket
Atlas missile

HARWIT, DR. MARTIN

Interviewer: Dr. David H. DeVorkin

Date of Interview: April 19, and June 20, 22, 1983

Documentation: Tapes, 170 page transcript

Abstract: Dr. Harwit discusses his background and education, service in the Army Chemical and Signal Corps, thesis on interferometry, post-graduate education at Cambridge, work at Cornell and contact with NRL, building rocket

sonde packages, debate over satellites versus balloons versus sounding rockets, relationship with NASA, infrared systems and Hadamard Transform spectroscopy.

Repositories: NASM

Individuals Mentioned:

Bondi, Hermann
Friedman, Dr. Herbert
Gold, Thomas

Institutions:

Cornell University	North Atlantic Treaty Organization
Massachusetts Institute of Technology	Oberlin College
National Aeronautics and Space Administration	U.S. Army Chemical Corps
Naval Research Laboratory	U.S. Army Signal Corps
	University of Michigan

Subjects:

Astronomy
Infrared astronomy
National Aeronautics and Space Administration

Other Entries:

Atmospheric research	Rocket-Sonde
Hadamard Transform Spectroscopy	Rockoon

HATTABAUGH, WILLIAM R.

Interviewer: Leroy L. Doig, III and Joseph M. Burge

Date of Interview: July 9, 1981

Documentation: 31 page transcript, index

Abstract: Mr. Hattabaugh reflects on his early association with NWC, NWC's relations with contractors, and changes in the Center's role in the Navy. He comments on the interaction of the R&D and T&E sides of the lab and relations with and support of the Fleet. Hattabaugh also notes the changes in the type of work at NNWC and talks about NWC's role in the surrounding community. He discusses Dr. William B. McLean.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Hillyer, Robert
McLean, Dr. William B.

Institutions:

Naval Weapons Center

Subjects:

McLean, Dr. William B.

Naval Weapons Center

Research, development, test, and evaluation (RDT&E)

HAUPT, RALPH

Interviewer: Steven J. Dick and Leroy Doggett

Date of Interview: September 23, 1986 and May 1987

Documentation: Tapes

Abstract: Mr. Haupt describes his years at the Naval Observatory, c. 1932-73, mostly in the Nautical Almanac Office.

Repositories: USNO

Subjects:

Astronomy

Nautical Almanac

Navigation

HAVENS, DR. RALPH J.

Interviewer: Dr. David H. DeVorkin

Date of Interview: October 6, 1983

Documentation: Tapes, 20 page transcript

Abstract: The interview with Havens covers his education, employment at NRL after World War II, meteorological research in V-2 and Rockoon experiments, the development of the Havens cycle gauge for air pressure, his contacts with NACA, and move to Ford Aeronautics.

Repositories: NASM

Institutions:

Ford Aeronautics

National Advisory Committee on
Aeronautics

Naval Research Laboratory
University of Michigan

Subjects:

Astronomy

Meteorology

Rocketry

Other Entries:

Atmospheric research

V-2 Rocket

Viking Rocket

HAY, MARLEY FOTHERINGHAM

Interviewer: Unknown

Date of Interview: 1950

Documentation: 19 page transcript

Abstract: Concerns submarine construction and submarine warfare in World War I.

Repositories: COL

Subjects:

Naval architecture

Submarines

HAYS, BURRELL W.

Interviewer: Leroy L. Doig, III

Date of Interview: April 21 and December 4, 1986

Documentation: Tapes, 55 page transcript

Abstract: Mr. Hays discusses his career at NWC, with special attention to the lessons learned in the Engineering Department and the importance of strong engineering discipline in all RDT&E programs; he also discusses the production problems with the Sparrow missile that led to the program's assignment to NWC for engineering fixes; the Advanced Common Intercept Missile Demonstration (ACIMD); political problems with the HARM program; and Headquarters influence in the management of the Center, including the oddities of the Freeman era.

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Repositories: NWC

Individuals Mentioned:

Carlisle, Frank

Cozzens, Ernest G.

Dickerson, CAPT Kenneth A.

Freeman, RADM Rowland G., III

Hillyer, Robert

Hollingsworth, Dr. Guilford L.

Paisley, Melvyn

Riggs, Leroy

Institutions:

Naval Weapons Center

PMTC

Raytheon

Other Entries:

Advanced Common Intercept Missile
Demonstration

Fleet support

High-Speed Antiradiation Missile (HARM)
Production engineering
Sparrow missile

HAYWARD, ADM JOHN T.

Interviewer: Albert B. Christman

Date of Interview: May 1966

Documentation: 38 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Hayward first describes the search for a new ordnance test sight. He talks about Parsons' "technical vision," and their contacts on the Manhattan Project. Hayward talks about ordnance work during and after World War II. Next is the problem of keeping scientists at NOTS after the war. Finally, he discusses Parsons the man-scientist and officer combined.

Repositories: DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Lauritsen, Dr. Charles C.

Parsons, RADM William S.
Thompson, Dr. Louis T. E.

Institutions:

California Institute of Technology
Naval Ordnance Test Station
Office of Scientific Research and Development

Other Entries:

Manhattan Project
Parsons, RADM William S.
Research management

HAYWARD, ADM JOHN T.

Interviewer: J. D. Gerrard-Gough

Date of Interview: July 26 and November 15, 1973

Documentation: 65 page transcript, index

Abstract: In part one, VADM Hayward discusses the role of rocket weapons in the Pacific during World War II, the intermixing of ordnance and rocket research, and tests at Armitage Field. Hayward describes his one assignment to NOTS, aircraft armament, and facilities at NOTS. He explains his responsibilities there, his trip to Japan after the war with Dr. Charles Lauritsen, and the choice of a successor for ADM Burroughs at NOTS. He also talks about ADMs Sykes and Switzer. In part two, Hayward makes broad comments about the educational system for dependents for NOTS employees and postwar research programs at NOTS.

Repositories: NWC, DTRC

Individuals Mentioned:

Brown, Dr. Ira Sprague
Burroughs, RADM Sherman E.
Fowler, Dr. William
Hussey, VADM George F.
Lauritsen, Dr. Charles C.
Parsons, RADM William S.

Ramsey, RADM DeWitt
Switzer, VADM W. G.
Sykes, RADM James B.
Temple, RADM H. B.
Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station

Subjects:

Naval Ordnance Test Station
Switzer, VADM W. G.
Sykes, RADM James B.

Other Entries:

Ordnance research
Rocket research

HAYWARD, ADM JOHN T.

Interviewer: CAPT Robert L. Hansen and Dr. Peter Bruton

Date of Interview: October 9, 1974

Documentation: 45 page transcript, index

Abstract: VADM Hayward discusses the establishment of the Assistant Chief of Naval Operations (R&D), the ACNO's relationship with the Bureaus, budget requirements for R&D in the 1950's, and how the R&D Review Board revised programs. He comments on the Libby Board study--in particular, the proposed merger of BUORD and BUAER, how interbureau technical committees operated, and ACNO (R&D) responsibility. Hayward also describes ACNO's effect on Navy programs, the impact of DDR&E, DCNO's duties as appropriations officer, and SECDEF McNamara's feelings on Navy R&D.

Repositories: NWC, DTRC

Individuals Mentioned:

Bennett, RADM Rawson
Burke, ADM Arleigh A.
Franke, William B.

Furth, RADM Frederick R.
Libby, VADM R. E.
McNamara, Robert S.

Institutions:

Bureau of Aeronautics
Bureau of Ordnance

Office of Assistant Secretary of Defense
(R&D)
Office of Naval Research

Subjects:

Assistant Chief of Naval Operations
(R&D)
Director of Defense Research and
Engineering

Libby Board
Technical Development Plan

HAYWARD, ADM JOHN T.

Interviewer: Dr. Evelyn M. Cherpak

Date of Interview: May 6, 1977

Documentation: 62 page transcript

Abstract: VADM Hayward discusses his education at the U.S. Naval Academy, his flight training, service on the *USS LANGLEY*, and work as the Assistant Chief Engineer at the Naval Aircraft Factory in Philadelphia, PA. He recalls being Experimental Officer at NOTS, the development of the atom bomb, and serving as the Commanding Officer of the Naval Ordnance Laboratory, 1954-1956.

Repositories: NWCN

Institutions:

Bureau of Aeronautics
Bureau of Ordnance
Naval Aircraft Factory

Naval Ordnance Laboratory
Naval Ordnance Test Station

Subjects:

Naval aviation
Ordnance

Other Entries:

Manhattan Project

HAYWARD, ADM JOHN T.

Interviewer: Nelson Wood

Date of Interview: August 15, 1978

Documentation: Tapes, transcript

Abstract: ADM Hayward talks about torpedo research and development and the Mark 48 Torpedo.

Repositories: NUM

Institutions:

Naval Underwater Systems Center

Subjects:

Mk 48 torpedo
Torpedo development

Other Entries:

Mark 48 Torpedo
Torpedoes

HAYWARD, ADM JOHN T.

Interviewer: Leroy L. Doig, III

Date of Interview: October 14, 15, 1987

Documentation: 41 page transcript

Abstract: VADM Hayward discusses his career in the strategic-weapons establishment, with special emphasis on his tour at NOTS and on the nuclear-weapons support programs being conducted at China Lake in the 1940s. He discusses the unique role of the Experimental Officer at NOTS/NWC, military-civilian relationships, the NOTS T&E establishment, and the changes in the way RDT&E is done. Also included is VADM Hayward's excellent 15 October 1987 address to the Indian Wells Valley Navy League chapter, in which he discusses the changes in U.S. military R&D and in NWC over the past 40 years and addresses the future of same. ACCESS LIMITED (S-167 ONLY)

Repositories: NWC

Individuals Mentioned:

Beckmann, CAPT Alcorn G.
Burroughs, RADM Sherman E.
Ellis, Dr. Emory L.

Fowler, Dr. William
Parsons, RADM William S.
Sykes, RADM James B.

Institutions:

Atomic Energy Commission
California Institute of Technology
Naval Weapons Center/Naval Ordnance Test Station

Other Entries:

Manhattan Project
Military-civilian relationships
Nuclear weapons development
Project Camel

R&D management
Research, development, test, and
evaluation (RDT&E)

HENDERSON, DR. J. E.

ASHWORTH, VADM FREDERICK L.

Interviewer: A. B. Christman

Date of Interview: April 1969

Documentation: 38 page transcript

Abstract: Dr. Henderson and VADM Ashworth discuss their roles in WWII and postwar atomic testing. A large portion of the interview covers the career of RADM William S. Parsons and his role as liaison between military personnel and scientists. Reference is made to Parsons' tenure as experimental officer at Dahlgren, his role in the Bikini tests, and his stint in BuOrd.

Repositories: DTRC

Individuals Mentioned:

Lauritsen, Dr. Charles C.
Parsons, RADM William S.

Schuyler, RADM Garret Lansing
Tuve, Dr. Merle

Institutions:
Bureau of Standards
Naval Research Laboratory

Other Entries:
Bikini tests
Manhattan Project
Parsons, RADM William S.

HENDERSON, DR. J. E.

Interviewer: Nelson Wood

Date of Interview: May 20, 1977

Documentation: Tapes, transcript

Abstract: Mr. Henderson, a former director of the Johns Hopkins Applied Physics Laboratory, describes its operations.

Repositories: NUM

Subjects:
Johns Hopkins University/Applied Physics Laboratory

HENIFIN, CAPT EDWARD E.

Interviewer: Dr. David K. Allison

Date of Interview: January 18, 1980

Documentation: 1 tape, 5 page summary

Abstract: CAPT Henifin reflects on R&D management in the Navy and at NRL. He also talks about management changes and what led to them.

Repositories: NRL

Institutions:
Naval Research Laboratory
Research and development

HERGET, DR. PAUL

Interviewer: Dr. David H. DeVorkin

Date of Interview: April 19, 20, 1977

Documentation: Tapes, 96 page transcript

Abstract: Dr. Herget discusses his family, background, schooling, work at the Cincinnati observatory, and the Rechen Institute. He speaks about his work during World War II, his position at the Nautical Almanac Office, and research through the 1950s. [Dr. Herget's papers are in the collection of the U.S. Naval Observatory]

Repositories: AIP

Institutions:

Nautical Almanac Office
Naval Observatory

Subjects:

Astronomy

Other Entries:

Nautical almanac

HESELTON, LESLIE

Interviewer: Dr. Mark Jacobsen

Date of Interview: September 21, 1987

Documentation: 1 tape, 18 page transcript

Abstract: Leslie Heselton discusses the Blue Ribbon (Fitzhugh) Report on DoD organization, 1970. Issues and topics discussed included laboratory productivity, procurement, and DARPA.

Repositories: NOSC

Institutions:

Atomic Energy Commission	Naval Electronic Laboratory
Defense Advanced Research Project Agency	Naval Ocean Systems Center
National Aeronautics and Space Administration	

Subjects:

Lab productivity
Procurement

Other Entries:

Fitzhugh Report (1970)

HIGHBERG, DR. IVAR

Interviewer: Leroy L. Doig, III

Date of Interview: April 1, 1981

Documentation: 26 page transcript, index

Abstract: Dr. Highberg discusses his work at NOTS in the late 1940's, the dedication of the Michelson lab, and changes in the use of NOTS facilities over the years. He describes early rocket missile test work at the lab and NOTS involvement in satellite tracking. Highberg talks about the use of computer simulation, digital fuze control work on missiles and guns, and the political ramifications for NOTS of the 1966 division of BUWEPS into NAVORDSYSCOM and NAVSHIPSYSCOM. He comments on the leadership of Dr. Louis T. E. Thompson and his personal philosophy of research and development.

Repositories: NHC, DTRC, NWC

Individuals Mentioned:

McLean, Dr. William B.
Thompson, Dr. Louis T. E.

Institutions:

Michelson Laboratory	Naval Ships Systems Command
Naval Ordnance Systems Command	Naval Weapons Center
Naval Ordnance Test Station	

Subjects:

Computer simulation
Naval Ordnance Test Station
Thompson, Dr. Louis T. E.

Other Entries:

Digital fuze control
Satellite tracking
Systems commands

HILL, DR. LEMMUEL L.

Interviewer: Dr. Joseph Marchese

Date of Interview: February 10, 1989

Documentation: 2 tapes, 39 page transcript

Abstract: Dr. Hill discusses his background and selection as Technical Director of NSWC, the assignment process for members of the Senior Executive Service under NAVMAT and the operation of the dual executives at Navy R&D Centers. Hill also discusses the goals of NSWC and the control that research sponsors try to exercise over R&D Centers. The operations and development of each NSWC department is evaluated, together with the successes and failures during Hill's tenure as Technical Director. Hill describes the philosophy behind Warfare Systems Architecture and Engineering, the role of the R&D Centers and the SYSCOMs, funding of R&D Centers, the proper mix of tech-base research, engineering development and fleet support for R&D Centers to undertake, the involvement of NSWC in the Strategic Defense Initiative and the problems facing his successor.

Repositories: DTRC

Institutions:

Defense Mapping Agency
Naval Material Command
Naval Surface Warfare Center
Navy R&D Centers
Navy Research Laboratory

Office of Naval Technology
Resource Utilization Board
Senior Executive Service
Space & Naval Warfare Systems Command
Systems Commands

Subjects:

Control of research
Engineering development
Fleet support
Funding
Goals and future of NSWC
Long range planning
Manage-to-payroll

Naval Surface Warfare Center
Personnel management
Role of technical director
Strategic Defense Initiative
Technology base research
WSA&E

HILLYER, ROBERT

Interviewer: Leroy L. Doig, III

Date of Interview: May 14, 27, 1982

Documentation: 77 page transcript, index

Abstract: Mr. Hillyer talks about the NOTS-Naval Ordnance Lab-Corona merger, the fuze department at NWC, and gains and losses of the 1967 lab consolidation. He comments on the role of the Technical Director at NWC, appropriate and inappropriate areas of research for the lab, and military-civilian relationships in the Navy. Hillyer discusses NWC Commanders, NWC relationships with DON in Washington, and his reasons for becoming DCNM(L). He describes his managerial philosophy, the outstanding contributions of NWC to the Navy, and the problem of declining productivity. Hillyer also expostulates on NWC's future and offers advice to NWC's new managers.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Freeman, RADM Rowland G., III
Harris, RADM William L.

Lahr, CAPT John Jude
McLean, Dr. William B.

Institutions:

Naval Weapons Center
Office of Director of Navy Laboratories

Subjects:

Laboratory consolidations
Military-civilian relationships

Naval Weapons Center
Technical directors

HILLYER, ROBERT

Interviewer: Dr. David K. Allison

Date of Interview: August 13, 1985

Documentation: 21 page transcript, index

Abstract: Hillyer discusses his time as Director of Navy Laboratories, the disestablishment of the Naval Material Command and its effect on the Navy's R&D community. This interview centers on funding issues, particularly the competition by laboratories for funds from Systems Commands. Hillyer also comments on the quality of personnel at the Navy laboratories, and the potential for the R&D community in the new, post-NAVMAT Navy research structure.

Repositories: DTRC

Individuals Mentioned:

Ailes, CAPT John
Andrews, Bert
Colvard, Dr. James
Hill, Dr. Lemmuel L.
Hollingsworth, Dr. Guilford L.

Law, Howard
Lehman, John
Messere, Earl
Paisley, Melvyn
Peterson, ADM Peter

Institutions:

Chief of Naval Development
Chief of Naval Material
Chief of Naval Research
Department of the Navy Systems
Acquisitions Review Council
Director of Navy Laboratories

Naval Air Systems Command
Naval Material Command
Naval Sea Systems Command
Navy R&D Centers
Office of the Chief of Naval Operations

Subjects:

Disestablishment of NAVMAT
Funding
Laboratory administration
Laboratory management

Navy Material Command disestablishment
Role of Director of Navy Laboratories
Role of Navy laboratories
Role of systems commands

HILLYER, ROBERT

Interviewer: Dr. Joseph Marchese

Date of Interview: February 20, 1990

Documentation: 2 tapes, 20 page transcript, index



MR. ROBERT HILLYER
FORMER TECHNICAL DIRECTOR OF THE NAVAL WEAPONS CENTER, 1977-1982;
DIRECTOR OF NAVY LABORATORIES, 1982-1983; TECHNICAL DIRECTOR
OF THE NAVAL OCEAN SYSTEMS CENTER, 1983-1990

Abstract: This interview is one in a series conducted to gather information of the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Hillyer begins by discussing the reasons for the disestablishment of NAVMAT. He also elaborates on the sequence of events which led to the placement of the R&D centers first under the Chief of Naval Research and then under SPAWAR. Mr. Hillyer provides details regarding the creation of SPAWAR and later the reasons behind the weakening of SPAWAR's position vis-a-vis the other systems commands. Mr. Hillyer describes the role of the R&D centers with regard to SPAWAR's WSA&E function and provides insight into SPAWAR's funding problems for that mission. Furthermore, he gives input regarding the command control, and communication product from SPAWAR as well as its assumption of the additional duty for antisubmarine warfare.

Repositories: DTRC

Individuals Mentioned:

Batzler, RADM Jack	Leuschner, RADM Robert
Clare, Dr. Thomas	Madden, CAPT Lewis
Clark, VADM Glenwood	Miller, VADM Richard
Colvard, Dr. James	Paisley, Melvyn
Dorman, RADM Craig	Weaver, RADM John
Hogg, ADM James	White, ADM Steven
Langston, CDR Marvin	Williams, ADM John G., Jr.
Latham, Dr. Donald	Witter, RADM Raymond
Lehman, John	

Institutions:

Department of Defense	Naval Surface Warfare Center
Johns Hopkins University/Applied Physics Laboratory	Office of the Chief of Naval Operations
Naval Air Systems Command	Office of the Chief of Naval Research
Naval Material Command	Office of the Secretary of Defense
Naval Ocean Systems Center	Space and Naval Warfare Systems Command
Naval Sea Systems Command	Special Projects Office
	U.S. Congress

Subjects:

AEGIS Program	Overhead funding
Battleforce architecture	Research and development centers
Command control, and communication	Systems engineering
Disestablishment of NAVMAT	Tomahawk weapons control system
Establishment of SPAWAR	Warfare systems architecture and engineering
Fleet ballistic missiles	
Integrated undersea surveillance system	

HIMES, ALLEN W.

Interviewer: Albert B. Christman

Date of Interview: April 14, 1978

Documentation: 1 tape, 25 page transcript

Abstract: Mr. Himes discusses the effect of the Bell Report, Project 97, and the Sherwin Plan. He comments on the establishment of the DNL, the first DNL--Dr. Gerald Johnson--and the SYSCOMs' attitude toward the DNL. Himes talks about the consolidation of the labs, Dr. Joel Lawson as the DNL, and

Navy R&D cutbacks and consolidations in the early 1970's. He describes his and Lawson's relations with Dr. Robert A. Frosch, former ASN (R&D), personnel problems in the DNL office, and his term as Deputy Assistant to the DNL.

Repositories: DTRC

Individuals Mentioned:

Frosch, Dr. Robert A.
Johnson, Dr. Gerald
Lawson, Dr. Joel

Institutions:

Naval Material Command
Office of Director of Navy Laboratories
Systems Commands

Other Entries:

Bell Report	Laboratory management
Frosch, Dr. Robert A.	Lawson, Dr. Joel
Johnson, Dr. Gerald	Project 97
Laboratory consolidations	Sherwin Report

HIMES, ALLEN W.

Interviewer: Dr. David K. Allison

Date of Interview: August 10, 1983

Documentation: 2 tapes, 36 page transcript

Abstract: Mr. Himes discusses the consolidation of the labs into the eight NAVMAT R&D Centers, headquarters administration of the labs, linkage of the labs to the acquisition process, and the organizational evolution of the DNL from 1965-1983. He comments on the leadership styles of the six DNLs and internal organization of the office.

Repositories: DTRC

Individuals Mentioned:

Hillyer, Robert	Parrish, CAPT David
Huang, Theodore S.	Probus, Dr. James H.
Langille, CAPT John	Swiggum, George
Law, Howard	Whittle, ADM Alfred J., Jr.
Lawson, Dr. Joel	

Institutions:

Office of Director of Navy Laboratories
Naval Material Command

Subjects:

Laboratory administration
Laboratory consolidations
Laboratory management

HOGG, ADM JAMES

Interviewer: Dr. Joseph Marchese

Date of Interview: February 22, 1990

Documentation: 1 tape, 12 page transcript, index

Abstract: This interview is one of a series conducted to gather information of the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Hogg begins by providing insight into the development of top-level warfare requirements in SPAWAR. He also deliberates on the composition of SPAWAR into three distinct subgroups. Of further interest are ADM Hogg's views regarding the relationship between SPAWAR and the Office of the Chief of Naval Operations' Director of Naval Warfare, OP-095, as well as the relationship between SPAWAR and the other systems commands. He also elaborates on the role of the research and development centers under SPAWAR and the reasons behind SPAWAR's diminishing position among the other systems commands. ADM Hogg concludes his interview with details regarding SPAWAR's warfare systems architecture function in light of its requirements, funding needs, and its relationship with OP-095.

Repositories: DTRC

Individuals Mentioned:

Clark, VADM Glenwood

Dorman, RADM Craig

Martell, VADM Charles B.

Paisley, Melvyn

Pittenger, RADM Richard

Wolkensdorfer, RADM Daniel

Institutions:

Center for Naval Analyses

Naval Air Systems Command

Naval Material Command

Naval Sea Systems Command

North Atlantic Treaty Organization

Office of the Chief of Naval Operations

Office of the Chief of Naval Research

Space and Naval Warfare Systems Command

Subjects:

Antisubmarine warfare (ASW)

"Black box" organization

Director of Naval Warfare

Disestablishment of NAVMAT

Establishment of SPAWAR

Research and development centers

Systems commands

Top-level warfare requirements

Total battle force

Warfare systems architecture

HOLLINGS, ANTHONY J.

Interviewer: Dr. David K. Allison

Date of Interview: January 4, 8, 1980

Documentation: 5 tapes, index

Abstract: Mr. Hollings discusses his career in the Royal Navy, harbor defense and shock and vibration programs at NRL, the difference between American and British methods of research, and the management of the NRL search program for *THRESHER*. He talks about research at NRL, ONR and NIF funding, and major organizational and management changes there between 1963 and 1980. The interview is supported by a collection of papers.

Repositories: NRL

Individuals Mentioned:

Bagley, James

Berman, Dr. Alan

Cleeton, Dr. Claud E.

Henifin, CAPT Edward E.

Klein, Dr. Elias

Mutch, Warren

Noel, Lee

Owen, RADM Thomas B.

Sapp, Earl

Waterman, Dr. Peter

Institutions:

Naval Research Laboratory

Office of Naval Research

Royal Navy

Woods Hole Oceanographic Institute

Subjects:

Oceanography

Other Entries:

Navy Industrial Fund

Shock

USS THRESHER

Vibration programs

HOOKE, RUTH

Interviewer: Dr. David K. Allison

Date of Interview: October 11, 1979

Documentation: 2 tapes

Abstract: Ms. Hooker discusses the establishment of the NRL technical library. She was originally hired as a physicist.

Repositories: NRL

Institutions:

Naval Research Laboratory

Subjects:

Naval Research Laboratory technical library

HOOPE, VADM EDWIN B.

Interviewer: Albert B. Christman

Date of Interview: February 1971

Documentation: 78 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Hooper describes his personal background and his contact with Parsons at the Naval Proving Ground at Dahlgren, Virginia. He discusses Parsons' influence on the post-war structure

of Navy R&D. Hooper comments on his post-war contacts with Parsons on the Atomic Energy Commission, Military Liaison Committee, and socially. He also talks about the Salt Wells Pilot Plant.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Parsons, RADM William S.
Rivero, ADM Horacio
Smith, VADM Levering

Institutions:

Atomic Energy Commission
Naval Ordnance Test Station
Naval Proving Ground

Subjects:

Parsons, RADM William S.
Salt Wells pilot plant

HOOPER, VADM EDWIN B.

Interviewer: CAPT Robert L. Hansen, Dr. Peter Bruton, and Susan Frutkin

Date of Interview: 1974

Documentation: 4 tapes, 135 page transcript

Abstract: This interview contains VADM Hooper's opinions on management of Navy R&D since the end of World War II. Topics include Bureau of Ordnance management, inter-bureau relationships, and the future of Navy R&D.

Repositories: NHC, DTRC

Individuals Mentioned:

Forrestal, James
McNamara, Robert S.

Institutions:

Bureau of Ordnance
Naval Weapons Center
Office of Naval Research

Other Entries:

Bureau of Ordnance
Foundational funding
Research and development

HOOPER, VADM EDWIN B.

Interviewer: Richard D. Glasow and Nelson Wood

Date of Interview: August 22, 1978

Documentation: Tapes, transcript

Abstract: VADM Hooper discusses his post-graduate ordnance training at the Naval Post Graduate School and MIT, and ordnance research during World War II.

Repositories: NUM

Individuals Mentioned:

Rivero, ADM Horacio

Ward, ADM A. G.

Institutions:

Massachusetts Institute of Technology

U.S. Naval Academy

Subjects:

Ordnance

Other Entries:

Ordnance training

HOOPER, RADM STANFORD C.

Date of Interview: 1951-1952

Documentation: 156 tapes, transcripts

Abstract: This series of tape recordings is part of the papers collection of RADM Stanford Caldwell Hooper donated to the Naval Historical Foundation and deposited in the Manuscript Collection of the Library of Congress. Hooper was head of the Radio Division of the Bureau of Engineering (1918-1923). This series contains 156 consecutively numbered tapes recorded by Hooper and his associates concerning the history of naval developments in radio, sonar, and radar. Typed transcripts exist for interviews 1-93, and there are additional notes and background materials. Tapes 150 and 151 are interviews with Dr. Leo C. Young of NRL and are duplicated in the NRL oral history collection.

Repositories: LC

Individuals Mentioned:

Young, Dr. Leo C.

Institutions:

Bureau of Engineering

Naval Research Laboratory

Subjects:

Radar

Radio communications

Sonar

HOPPER, COMO GRACE BREWSTER (MURRAY)

Interviewer: Mike Wallace

Date of Interview: 1983

Documentation: Transcript

Abstract: This is a transcript of the "60 Minutes" interview of COMO Hopper by Mike Wallace. COMO Hopper discusses her background and training, relatives in the Navy, her work with the first computers in the Navy, and her contributions to the development of computer language.

Repositories: RAD

Institutions:
Office of Naval Research

Subjects:
Computer language
Computers

Other Entries:
Common Business Oriented Language (COBOL)

HOPPER, COMO GRACE BREWSTER (MURRAY)

Interviewer: Unknown

Date of Interview: February 1983

Documentation: 6 tapes

Abstract: This interview is part of the "Women in the Federal Government Project," sponsored by the Arthur and Elizabeth Schlesinger Library on the History of Women in America and funded by the National Endowment for the Humanities. COMO Hopper discusses her work with the first Navy computers and her contributions in developing computer language.

Repositories: RAD

Institutions:
Office of Naval Research

Subjects:
Computer language
Computers

Other Entries:
Common Business Oriented Language (COBOL)

HORACEK, CAPT JERRY

Interviewer: Leroy L. Doig, III

Date of Interview: June 21, 1983

Documentation: Tapes, 47 page transcript, index

Abstract: CAPT Horacek discusses his impressions of NWC, the role of the Navy laboratories, military-civilian relationships, land and airspace management, geothermal development, housing, feral animal control, and the Commercial Activities contracting program. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Dotson, Dr. Thomas
Hillyer, Robert
Lahr, CAPT John Jude

Institutions:

Naval Weapons Center

Other Entries:

Commercial Activities Program
Environment
Geothermal

Military housing
Military-civilian relationships
Naval Weapons Center

HOWARD, JIM

Interviewer: Tom Misa and Ed Todd

Date of Interview: June 9, 1982

Documentation: 1 tape, index

Abstract: Mr. Howard discusses airplane use in antisubmarine warfare, the systems approach to sonobuoy development from 1952 to the present, and the technical navigator, TACO. He talks about the design of the P-3C aircraft, including the incorporation of computers and TACO, LOFAR and DIFAR. Howard comments on present goals of NADC, including the Advanced Signal Processor, Very High Speed Integrated Circuitry, changes in sonobuoy research, and the Julie sonobuoy.

Repositories: NADC, DTRC

Individuals Mentioned:

Gleiter, Werner

Institutions:

Naval Air Development Center

Subjects:

Antisubmarine aircraft
Antisubmarine warfare (ASW)
Antisubmarine warfare research

Low frequency radar
Sonobuoy research
Sonobuoys

Other Entries:

Julie Sonobuoy Project

HUBBARD, WILLIAM

Interviewer: Glenn E. Bugos

Date of Interview: August 9, 1985

Documentation: 30 page transcript

Abstract: Hubbard discusses his involvement in early Department of Defense R&D efforts in Vietnam, and the VLAP program, 1966-1969. VLAP was a program designed to bring the Navy Laboratories to bear on immediate tactical problems, and worked best on an informal basis. Hubbard details the common features of VLAP with WWII Operations Evaluation Group efforts, the role of VLAP, the sources of funding and tasking for the program, interservice cooperation by VLAP and resistance to VLAP by the Systems Commands. Hubbard also talks more generally about the role of Science Advisors to major field commanders, operations analysis and managing R&D efforts in a tactically effective manner.

Repositories: DTRC

Institutions:

Defense Communications Planning Group
Director of Navy Laboratories
Military Assistance Command/Vietnam
Mitre Corporation
Navy Ordnance Laboratory

Navy Research and Development Unit/
Vietnam
North Atlantic Treaty Organization
Operations Evaluation Group
Provost Committee

Subjects:

Communications
Laboratory tactical support
Operations analysis

Precision guided missiles
Vietnam Laboratory Assistance Program

HULBURT, DR. EDWARD O.

Interviewer: Dr. David K. Allison

Date of Interview: August 22 and September 8, 1977

Documentation: 5 tapes, 49 page transcript

Abstract: Dr. Hulburt talks about his background and education, work with the Signal Corps Radio Laboratory in Paris during World War I, and listening stations at the front, employment at Johns Hopkins and the University of Iowa, early days of working at NRL, short radio waves and skip distances, ionospheric research, naval camouflage, infrared signaling and detection, the

Optics Division, laboratory build-up before World War II, rocket studies and the Vanguard Program, work with World War II scientific societies, his involvement with the International Geophysical Year, and management of research at NRL from 1949-1955.

Repositories: NRL

Individuals Mentioned:

Bittenger, Charles
Gunn, Dr. Ross
Karle, Dr. Isabella
Karle, Dr. Jerome

Lawson, Dr. Leo H.
Maris, Harry
Taylor, Dr. A. Hoyt
Tousey, Dr. Richard

Institutions:

International Geophysical Year
Johns Hopkins University

Naval Research Laboratory
U.S. Army Signal Corps

Subjects:

Camouflage
Infrared signaling and detection

International Geophysical Year
Optics

Other Entries:

Optics research
Space research

V-2 Rocket
Vanguard program

HUNSAKER, JEROME CLARKE

Interviewer: Unknown

Date of Interview: 1960

Documentation: 112 page transcript

Abstract: This interview mentions the Naval Academy, 1904-1908, naval architecture, MIT, research in Europe, stability analysis and wind tunnels, his Navy duty in World War I, flying boats, the first aircraft carrier 1922, non-rigid air ships, and his position as coordinator of research for the Navy, 1940.

Repositories: COL

Subjects:

Aircraft design
Massachusetts Institute of Technology

Naval architecture
Wind tunnels

Other Entries:

Airships
Flying boats



DR. EDWARD O. HULBERT
FIRST DIRECTOR OF RESEARCH OF THE NAVAL RESEARCH LABORATORY

HUNT, F. L. "PETE"

Interviewer: Albert B. Christman

Date of Interview: November 1980

Documentation: 2 tapes, 45 page transcript

Abstract: Mr. Hunt talks about how he came to the New London lab as a scientist from Columbia University, other scientists from Columbia at the time, and the influence of Harvard University there. He describes wartime work done in New London in sonar, submarine research, and the testing of new concepts and discoveries. Other topics include: Dr. Harold Nash, Dr. Horton, the Commanding Officers at New London, postwar R&D, and the merger of the New London and Newport labs into the Naval Underwater Systems Center in 1970.

Repositories: DTRC

Individuals Mentioned:

Horton, Dr.
Ide, John

Nash, Dr. Harold
Pryor, CAPT William L.

Institutions:

Columbia University
Harvard University
Naval Underwater Systems Center

Office of Scientific Research and
Development

Subjects:

Sonar

Other Entries:

Establishment of Naval Underwater Systems Center
Nash, Dr. Harold
Submarine research

HUNT, WILLIAM

Interviewer: Dr. Joseph Marchese

Date of Interview: March 25, 1987

Documentation: 1 tape, 18 page transcript

Abstract: Hunt describes his background, previous assignments, selection as DNL, and the initiatives he began as DNL to improve the communications and remove redundancy in the Navy R&D community. Hunt discusses the balance of tech-base management vs engineering development work, the competition within and effectiveness of the Naval Material Establishment, as well as the role of Naval officers in R&D, the funding of R&D through NIF and the effects of budget tightening. He also reflects on personnel policy, on the reasons he had for leaving his position as DNL and on the future of the Navy's R&D effort.

Repositories: DTRC

Institutions:

Naval Air Systems Command
Naval Material Establishment
Navy research and development centers
Office of the Director of Navy
Laboratories

Office of the Secretary of the Navy
Space and Naval Warfare Systems Command
Systems commands

Subjects:

Coopers and Lybrand Study
Employment levels
In-service engineering
Long range planning
Naval Material Establishment

Navy Industrial Fund
Role of Director of Navy Laboratories
Senior Executive Service
Technology base management

HUNTER, DR. HUGH

Interviewer: Elizabeth Babcock

Date of Interview: May 30, 1975

Documentation: 26 page transcript, index

Abstract: Dr. Hunter discusses the formation of the Technical Research Board by Dr. Louis T. E. Thompson at NOTS. He talks about Dr. Frederick W. Brown as Technical Director and the relationship between Levering Smith, the Associate TD, and Dr. Thompson when he was TD. Hunter comments on his own move from the Research Division to the Central Staff at NOTS and how the Ballistics Division at NOTS disappeared. Hunter reflects on his move to the Propulsion Division and the importance of varied career experience at NOTS.

Repositories: NWC, DTRC

Individuals Mentioned:

Brown, Dr. Frederick W.
McLean, Dr. William B.
Sage, Dr. Bruce
Shenk, Dr. John H.

Smith, VADM Levering
Thompson, Dr. Louis T. E.
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Brown, Dr. Frederick W.
Smith, Levering

Technical Research Board (NOTS)
Thompson, Dr. Louis T. E.

HUNTER, DR. HUGH

Interviewer: Albert B. Christman

Date of Interview: August 14, 1975

Documentation: 21 page transcript, index

Abstract: Dr. Hunter makes general comments on R&D and NOTS/NWC, including working under Dr. William B. McLean, CAPT Hardy, and Dr. Haskell G. Wilson. He comments on the selection of leadership, organizational changes, and the need to justify research at NOTS/NWC. He comments on the transfer of NOTS research findings to the outside world, travel restrictions for NOTS employees, and the future of R&D in the Navy.

Repositories: NWC, DTRC

Individuals Mentioned:

Bennett, Dr. Ira

Hardy, CAPT John I.

Hollingsworth, Dr. Guilford L.

LaBerge, Dr. Walter B.

McLean, Dr. William B.

Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station

Naval Weapons Center

Subjects:

Hardy, CAPT John I.

McLean, Dr. William B.

Naval Ordnance Test Station

Naval Weapons Center

Wilson, Dr. Haskell G.

HUSSEY, VADM GEORGE F.

Interviewer: Unknown

Date of Interview: 1965

Documentation: 582 page transcript

Abstract: VADM Hussey talks about his education at the Naval Academy, particularly courses in ordnance and ballistics, and the work in the Bureau of Ordnance Armor and Projectile Section. He discusses his service as Proof Officer at the Naval Proving Ground, in Mine research, and as Assistant Chief and Chief of the Bureau of Ordnance, and gives his opinions of contractor-operated ordnance plants and postwar ordnance research.

Repositories: COL, NHC

Institutions:

Bureau of Ordnance

Naval Proving Ground

Subjects:
Mine research
Ordnance

HUSSEY, VADM GEORGE F.
THOMPSON, DR. LOUIS T. E.

Interviewer: Albert B. Christman

Date of Interview: April 1966

Documentation: 112 page transcript, index

Abstract: This extensive interview includes a history of Navy ordnance bases from around 1910 to after World War II. It includes a discussion of whether NOTS should be a research or a test station. Thompson and Hussey also describe RADM William S. Parsons' relations with scientific community and his work on the Proximity Fuze Project. They comment on ADM Hussey's time as head of BUORD and James Forrestal's tenure as Secretary of the Navy.

Repositories: NWC, DTRC

Individuals Mentioned:

Blandy, ADM George
Burroughs, RADM Sherman E.
Forrestal, James
Michelson, Dr. Albert A.
Moulton, Dr. Forest R.

Parsons, RADM William S.
Schoeffel, RADM Malcom F.
Schuyler, CAPT Michael
Tuve, Dr. Merle

Institutions:

Naval Ordnance Test Station

Subjects:

Forrestal, James
Naval Ordnance Test Station

Ordnance
Parsons, RADM William S.

Other Entries:

Proximity fuze

HUSTVEDT, VADM OLAF M.

Interviewer: Fred Durant, Paul Garber, Lou Casey, and Erling Hustvedt.

Date of Interview: February 11, 1972

Documentation: 37 page transcript

Abstract: VADM Hustvedt comments on his associations with Dr. Robert Coddard and the Navy-Army bombing tests against OSTFRIELAND and FRANKFURT--old German warships. He discusses the actions of COL (later GEN) Billy Mitchell during those tests and talks about the explosion of the dirigible, SHENANDOAH, in 1925.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Goddard, Dr. Robert
Mitchell, BGN William

Institutions:

Bureau of Ordnance

Other Entries:

Aerial bombing	Mitchell, BGN William
Airships	Rocket research
Goddard, Dr. Robert	USS SHENANDOAH (ZR)

HUSTVEDT, VADM OLAF M.

Interviewer: Albert B. Christman

Date of Interview: March 17, 1972

Documentation: 19 page transcript

Abstract: This interview concentrates on the role of Dr. Robert Goddard in the development of rocketry. Hustvedt discusses his years with the Bureau of Ordnance, as an experimental officer and as one of the first participants in the post-graduate program there. Goddard was under a personal service contract with the Bureau at this time (1920s), and Hustvedt talks about the relations the Bureau had with Goddard, problems funding his liquid fuel experiments, public reaction to Goddard's views on the future of rocketry, and the difficulties Goddard had in working for the Navy.

Repositories: DTRC

Institutions:

Army Proving Ground, Aberdeen	Naval Powder Factory, Indian Head
Bureau of Ordnance	Naval Proving Ground, Dahlgren
Clark College	

Subjects:

Funding	Liquid rocket fuel
Goddard, Dr. Robert	Rocketry

JACKSON, VADM ANDREW MCBURNEY, JR.

Interviewer: Unknown

Date of Interview: November 1971 and April 1972

Documentation: 385 page transcript, index

Abstract: Naval aviator, project officer in design of Grumman F6F Hellcat at Bureau of Aeronautics, later served with Atomic Energy Commission.

Repositories: NHC, NWCM, USNA, USNI

Institutions:

Atomic Energy Commission
Bureau of Aeronautics

Other Entries:

Aircraft design
Grumman F6F

JACKSON, LEROY

Interviewer: Elizabeth Babcock

Date of Interview: November 16, 1990

Documentation: 3 tapes, 94 page transcript, index

Abstract: This interview covers aspects of community affairs at NOTS from 1948 to 1964. Mr. Jackson first discusses some of the work done at NOTS, and the employee-management relations there. Much of the interview concerns the difficulties encountered in running the China Lake community like a Navy-controlled base. This discussion includes housing problems, educational issues, community and county services for civilians, and efforts to change county redistricting boundaries. Finally, Mr. Jackson provides information on the unique characteristics of the NOTS establishment.

Repositories: NWC, DTRC

Individuals Mentioned:

Anderson, Robert
Ashburn, Roy
Ashworth, VADM Frederick L.
Buchanan, Dr. Paul
Engle, Senator Claire
Fallgatter, Calvin J.
Freeman, RADM Rowland G., III

McLean, Dr. William B.
O'Reilly, Richard
Parker, George
Stroop, VADM Paul D.
Vieweg, RADM Walter V. R.
Wilson, Dr. Haskell G.

Institutions:

American Society for Public
Administration
Bank of America
Bureau of Ordnance
Federal Housing Administration

Maturango Museum
Naval Ocean Systems Command
Naval Ordnance Testing Station
Naval Weapons Center
University of California at Los Angeles

Subjects:

Commanding officers
County services
Educational services

Move from Pasadena to China Lake
Naval Ordnance Test Station community

JAGIELLO, LEONARD T.

Interviewer: Leroy L. Doig, III

Date of Interview: January 15, 1988

Documentation: Tapes, 71 page transcript, index

Abstract: Mr. Jagiello discusses the early days at China Lake and the origins of various programs. The interview concentrates on the Sidewinder program, including the competition with Hughes (Falcon) and Raytheon (Sparrow), and includes good information on Shrike (ARM), Moray, and NOTSNIK. Military-civilian relationships, NWC-Headquarters relationships, and in-house vs industry R&D are also discussed. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Crockett, Sidney	Schirra, CAPT Walter M.
Doig, Leroy L., Jr.	Smith, VADM Levering
Hayward, ADM John T.	Thompson, Dr. Louis T. E.
McLean, Dr. William B.	Wilcox, Dr. Howard A.
Moran, VADM William	Wilson, Dr. Haskell G.
Riggs, Leroy	

Institutions:

Naval Ordnance Laboratory
Naval Weapons Center

Other Entries:

Defense suppression	Navy space program
Falcon	Program management
In-house, out-of-house mix of work	Shrike
Military-civilian relationships	Sidewinder Missile Project
Naval Ordnance Test Station Satellite (NOTSNIK)	Sparrow missile

JAMES, RICHARD

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 19, 1982

Documentation: 1 tape, index

Abstract: Mr. James discusses his personal background and the organization and history of the LAMPS project from 1968 to the present. Included in the LAMPS history are sections on LAMPS as an air and ship project, the importance of documentation in the program, and relations between NADC and NAVAIR on LAMPS. He also talks about IBM's role in LAMPS.

Repositories: NADC, DTRC

Individuals Mentioned:

Janaco, Tom

Institutions:

International Business Machine Company
Naval Air Development Center

Naval Air Systems Command
Sikorsky Aircraft Company

Subjects:

Antisubmarine aircraft
Antisubmarine warfare (ASW)
Helicopter:

International Business Machines
Light airborne multipurpose system

JENNISON, JAMES H.

Interviewer: J. D. Gerrard-Gough

Date of Interview: October 25, 1975

Documentation: 27 page transcript

Abstract: Mr. Jennison discusses his background, the Mark 13 torpedo, and changes at the NOTS-Pasadena laboratory when the Navy took it over. He describes his work with Variable Angle Launcher and the benefits of working with the NOTS-China Lake team.

Repositories: NWC, DTRC

Individuals Mentioned:

Lindvall, Dr. Frederick C.
Saylor, William
Thompson, Dr. Louis T. E.

Institutions:

Bureau of Ordnance
Naval Ordnance Test Station
Naval Weapons Center

Other Entries:

Naval Ordnance Test Station
Torpedo Mark 13
Variable-angle torpedo launcher

JENNISON, JAMES H.

Interviewer: Albert B. Christman

Date of Interview: March 15, 1978

Documentation: 1 tape, 17 page transcript

Abstract: Mr. Jennison discusses the recruitment of qualified scientists for the Navy's West Coast labs--in particular, the role of the Board of Scientists and the Civil Service Commission and competition with private industry. He comments on the increasing amount of bureaucracy involved in running a lab and notes a few examples. In addition, Jennison explains the problems involved in procuring supplies and awarding contracts because of recent government regulations. He talks about his work at the Pasadena Annex

of NOTS, the Annex's absorption into NUC in San Diego, and his move to San Diego. He describes advantages that small labs like the Annex have over larger labs like NOTS. Labs still offer good opportunities for scientists and engineers who want to work in R&D and others who want to work in management

Repositories: NHC, DTRC

Institutions:

Naval Ocean Systems Center
Naval Ordnance Test Station
Naval Undersea Center

Naval Weapons Center
Pasadena Annex

Subjects:

Contracting
Laboratory management

JEPPSON, MORRIS R.

Interviewer: Albert B. Christman

Date of Interview: March 1967

Documentation: 23 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mr. Jeppson recalls two atomic bomb flights which included Parsons, one to Tinian and one to Hiroshima. He describes crew reaction to the Hiroshima bomb and events after the plane's return. Jeppson also speaks about relationships between scientists and officers around the time of the Hiroshima bombing and his battle duty.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Ashworth, VADM Frederick L.
Doll, Dr. Edward B.
Parsons, RADM William S.

Other Entries:

Manhattan Project
Parsons, RADM William S.

JOHNSON, CHARLES Y.

Interviewer: Dr. David K. Allison

Date of Interview: January 8, 11, 15, and May 25, 1979

Documentation: 11 tapes, index

Abstract: Dr. Johnson discusses his background and education, working conditions and radar development at NRL during World War II, his transfer to the NRL Communications Security Group, upper air research, telemetry systems, buzz bomb defense, V-2 rockets, Aerobee rockets, testing at White Sands, the

Viking rocket on the NORTON SOUND, cryogenic fuel problems, cosmic ray experimentation, gamma ray detectors, and the ONR Skyhook Program. He details the effect of Sputnik on research programs, the exodus from NRL to Goddard, the loss of NSF and DNA funding, satellite navigation and communications, use of mass spectrometers, the SOLRAD Hi satellite, Skylab, and ionospheric research.

Repositories: NRL

Individuals Mentioned:

Bourland, Langford	Kegley, Larry
Chubb, Dr. Talbot A.	Pressly, Eleanor
Cleeton, Dr. Claud E.	Reed, Edith
Gebhard, Dr. Louis A.	Taylor, Dr. A. Hoyt
Hagen, Dr. John P.	Young, Dr. Leo C.
Holmes, Julian	

Institutions:

National Aeronautics and Space Administration
Naval Research Laboratory
Office of Naval Research

Subjects:

Cosmic rays	Radio transmitters
Gamma rays	Satellites
Radar	Telemetry
Radio communications	

Other Entries:

Aerobee Rocket	Skyhook
Atmospheric research	Skylab
Ionospheric research	USS NORTON SOUND
Kawai Rocket	-2 Rocket
Saturn Rocket	Viking Rocket

JOHNSON, CHARLES Y.

Interviewer: Peg Shea and Allan Needell

Date of Interview: March 3 and April 21, 1982

Documentation: Tapes, 61 page transcript

Abstract: These interviews trace Johnson's work at NRL, beginning with World War II assignments, his contact with the atomic bomb, post work in the rocket-sonde division, and the V-2 program, the organizational structure of NRL, his involvement with the IGY, Project Vanguard, the formation of NASA, and NASA's relationship with NRL, the NRL satellite program, Aerobee and Viking projects, and continuing work in cosmic ray physics.

Repositories: NASM

Individuals Mentioned:

Friedman, Dr. Herbert	Newell, Dr. Homer E.
Hagen, Dr. John P.	Rosen, Milton
Krause, Dr. Ernst H.	Tousey, Dr. Richard

Institutions:

National Aeronautics and Space Administration
Naval Research Laboratory

Subjects:

Ionospheric physics	Radar
National Aeronautics and Space Administration	Rocketry
Naval Research Laboratory	Satellites

Other Entries:

Aerobee Rocket	U-2 Rocket
Cosmic ray physics	Vanguard Program
Manhattan Project	Viking Rocket
Rocket-Sonde	

JOHNSON, DR. FRANCES SEVERIN

Interviewer: Unknown

Date of Interview: June 23, 1982

Documentation: Tapes, 58 page transcript

Abstract: The interview covers Johnson's early life and education in Canada, his training in physics at the University of Alberta, and graduate school at Berkeley and UCLA. He discusses work on the V-2 rocket research program with Tousey, Hulburt, and Krause at NRL.

Repositories: NASM

Individuals Mentioned:

Hulburt, Dr. Edward O.
Krause, Dr. Ernst H.
Tousey, Dr. Richard

Institutions:

Naval Research Laboratory
University of Alberta

Subjects:

Meteorology
Solar physics

Other Entries:

Solar spectrograph
V-2 Rocket

JOHNSON, DR. ROBERT V.

Interviewer: Dr. Joseph Marchese

Date of Interview: March 1, 1990

Documentation: One tape, 25 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Johnson initially discusses the reasons for establishing SPAWAR, and the reaction at NAVAIR to this establishment. He then describes problems of overall coherence in top-level warfare requirements, and his perception of possible discrepancies between SPAWAR's theoretical functions and its actual operations. He further provides information concerning the interaction between SPAWAR 30 (WSA&E Directorate) and NAVAIR. Mr. Johnson discusses the issues of horizontal versus vertical management, and force-pervasive versus platform-specific programs, and their relationship to the transfer of program from SPAWAR. These transfers, he states, were related to an effort to improve SPAWAR's ability to perform the WSA&E function. Discussions of NAVAIR's stance on the organizational placement of research and development centers, and the relationship among SPAWAR, NAVAIR, and the Naval Sea Systems Command follow. Finally, Mr. Johnson elaborates on the complexities and difficulties encountered in accepting and implementing WSA&E.

Repositories: DTRC

Individuals Mentioned:

Clark, VADM Glenwood

Colvard, Dr. James

Doak, Robert

Grich, RADM Richard

Lehman, John

Leuschner, RADM Robert

Paisley, Melvyn

Rowden, VADM William

Shrader, Joseph

Topping, RADM Robert

Weaver, RADM John

Wilkinson, VADM Joseph, Jr.

Wilson, RADM John, Jr.

Institutions:

Naval Air Development Center

Naval Air Systems Command

Naval Electronic Systems Command

Naval Material Command

Naval Ocean Systems Center

Naval Sea Systems Command

Office of Naval Technology

Office of the Chief of Naval Operations

Space and Naval Warfare Systems Command

Strategic Systems Project Office

Subjects:

Acquisition

Command control, communication, and intelligence

Disestablishment of NAVMAT

Electronic warfare

Establishment of SPAWAR

Global positioning satellite

Joint Tactical Information

Distribution Systems

Naval Air Systems Command

Naval Sea Systems Command

Research and development

Total Quality Management

Warfare systems architecture and engineering

Whittle Committee Study

JOHNSON, ADM ROY L.

Interviewer: Unknown

Date of Interview: December 1980

Documentation: 350 page transcript, index

Abstract: ADM Johnson, a Naval aviator, discusses the seaplane as weapons system, and the effectiveness of PBV flying boats.

Repositories: NHC, NWCM, USNA, USNI

Subjects:
Flying boats
Seaplanes

JONES, DR. EARL F.

Interviewer: Albert B. Christman

Date of Interview: March 10 and 15, 1978

Documentation: 27 page transcript

Abstract: Dr. Jones discusses his personal background, personnel research in World War I and World War II, and the rationale behind and need for personnel research. He comments on the effect of policy decisions on the labs, the differences in personnel research in the 1960's and 1970's, manpower problems, and the effect of computers on personnel research. Jones talks about the creation of NPRDC, its equipment needs, and location. He explores the sources for new research, personnel research in wars and crises, and high-tech personnel requirements of the Navy. Jones also reflects on NPRDC's history and the influence of Dr. Edward Dudek.

Repositories: NWC, DTRC

Individuals Mentioned:
Dudek, Dr. Edward
Zumwalt, ADM Elmo

Institutions:
Navy Personnel Research and Development Center

Other Entries:
Manpower modeling
Personnel research

JOSEPHSON, ADM JOSEPH

Interviewer: Dr. Joseph Marchese

Date of Interview: March 20, 1990

Documentation: 1 tape, 17 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Josephson initially provides details of his military career and discusses his role as OP-951, Director of ASW Division, and simultaneously as PM-4, Director of ASW Project Office. He also illustrates the evolution of PM-4 into three main functions and provides insight into its broader role of overseer and budget controller. ADM Josephson also describes SPAWAR's ASW activities and goes into great detail regarding the reasons behind the efforts to disestablish PM-4 which finally was accomplished under ADM White. He compares the differences between PM-4 and WSA&E function in SPAWAR and addresses the weaknesses in the WSA&E concept. Finally, ADM Josephson provides names of other who might assist in historical research.

Repositories: DTRC

Individuals Mentioned:

Cox, CAPT Duane
Lehman, John
Martini, RADM Richard
McKee, VADM Kenneth
Waller, VADM Edward

White, ADM Steven
Whittle, ADM Alfred J., Jr.
Williams, ADM John G., Jr.
Wolkensdorfer, RADM Daniel

Institutions:

IBM, Inc.
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Office of the Chief of Naval Operations
Planning Systems, Inc.
Space and Naval Warfare Systems Command

Subjects:

AEGIS program
Antiair warfare
Antisubmarine undersea warfare
Antisubmarine warfare (ASW)
Architecture and engineering
Disestablishment of NAVMAT

Enhanced Modular Signal Processor
Establishment of SPAWAR
Proteus program
Towed array
Warfare systems architecture and engineering

JOYNER, DR. TAYLOR B.

Interviewer: Leroy L. Doig, III

Date of Interview: March 18, 1986

Abstract: Dr. Joyner discusses his career in explosives research and development at NWC, the Center's accomplishments in energetic materials RDT&E, explosives safety research, energetic materials technology, in-house development capabilities, and the China Lake corporate culture. The interview contains important information on the investigations by NWC of the 1973

munition-train explosions at Roseville, California, and Benson, Arizona; the investigations allowed the continuance of rail shipping ordnance and saved the Government at least \$50,000,000 in damage claims. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Henry, Dr. Ronald
McEwan, Dr. William
Pakulak, Jack

Pearson, John
Schafer, Howard

Institutions:

Naval Weapons Center

Other Entries:

Energetic materials technology
Explosives R&D
Munitions safety

Naval Weapons Center
Roseville-Benson investigation

KALAF, GEORGE

Interviewer: Dr. Joseph Marchese

Date of Interview: July 13, 1989

Documentation: 2 tapes

Abstract: This interview is one of a series conducted to gather material for a history of the development of the MK 48 torpedo. Kalaf describes his background and work at the Naval Ordnance Laboratory over three decades, and especially his involvement in the MK 48 torpedo program. This includes an account of the early development of the MK 48, the Clevite involvement, the swashplate engine, the decision to bring in NSWC as a technical director and the switch to a dual role for the MK 48. Kalaf gives a detailed discussion of the "war shots" of 1971 and 1974-1975 of the MK 48, and the improvements inspired by those tests. This part of the interview comprises approximately 45 minutes; a second tape includes a 30 minute discussion on trends in engineering development, especially in mine warfare over the past forty years.

Repositories: DTRC

Institutions:

Clevite Corporation
Martin Marietta Corporation
Naval Ocean Systems Center
Naval Ordnance Laboratory/Naval Surface
Warfare Center

Naval Underwater Systems Center
Ordnance Research
Laboratory/Pennsylvania
State University
Westinghouse Electric Company

Subjects:

Advanced Capability (ADCAP) Torpedo
Advanced Lightweight Torpedo
Engineering development
Homing systems
Mines and mine warfare

Submarine Rocket (SUBROC)
Swashplate engine
Torpedo development
Wire guidance

KARLE, DRS. ISABELLA AND JEROME

Interviewer: Dr. James J. Bohning and Dr. David K. van Keuren

Date of Interview: February 26, June 15, and September 9, 1987

Documentation: Tapes, 94 page transcript

Abstract: Drs. Isabella and Jerome Karle discuss their backgrounds and education and their long-term employment commencing in the mid-1940's at the Naval Research Laboratory where they engaged in scientific research into such areas as gas electron and x-ray diffraction. The favorable atmosphere for doing research which they found at NRL permitted them to construct sophisticated laboratory equipment with which to pursue their pioneering investigations into the structure of matter which ultimately led to Dr. Jerome Karle's award, in collaboration with Dr. Herbert Hauptman, of the Nobel Prize in Chemistry in 1985.

Repositories: NRL

Individuals Mentioned:

Ainsworth, John
Bennett, Brad
Berman, Dr. Alan
Birks, Laverne
Brockway, Lawrence
Friedman, Dr. Herbert
Hauptman, Dr. Herbert
Hulburt, Dr. Edward O.

Owen, RADM Thomas B.
Page, Dr. Robert
Sanderson, Dr. John A.
Schafrin, Elaine
Swick, David
Wieland, Theodor
Witkop, Dr. Bernhard
Zisman, Dr. William A.

Institutions:

City College of New York
Harvard University
Laboratory for the Structure of Matter
Metallurgical Laboratory
Naval Research Laboratory

Royal Swedish Academy of Sciences
U.S. Geological Survey
University of Michigan
Wayne State University

Subjects:

Crystal structure
Gas electron diffraction
High-vacuum equipment
Quantitative analysis of diffraction patterns

Scientific training in laboratory methods
X-ray diffraction

Other Entries:

Fluoride compounds
Non-negativity
Plutonium

Shuttle disaster
Vibrational amplitude of molecules

KEENER, CHARLES E.

Interviewer: Tom Misa and Ed Todd

Date of Interview: June 28, 1982

Documentation: 1 tape, index

Abstract: Mr. Keener discusses his arrival at NADC in 1945, his educational background, and the uses of radar in World War II. He describes his career at NADC, including work with AEEL, AWRD, and his position as Director of the Technical Intelligence Department. Keener comments on NADC from 1945 to the early 1950's, the rise of contract monitoring functions of NADC, and the reorganization of AWRD into SAED. He talks about overall reorganizations at the center and the systems approach.

Repositories: NADC, DTRC

Institutions:

Applied Electrical and Electronics Laboratory
Naval Air Development Center

Subjects:

Aircraft antennas
Communications

Radar
Systems approach

Other Entries:

Polaris program
Submarine communications

Technical Intelligence Department (NADC)
Very-low frequency communications

KEIL, DR. ALFRED H.

Interviewer: Enid Kumin

Date of Interview: October 10, 1975

Documentation: 79 page transcript

Abstract: Dr. Keil describes how he was offered a job by the United States War Department in 1947 after working for the German Navy during World War II, how he worked for BUSHIPS and later the David Taylor Model Basin where he was in charge of the structures laboratory and later became the Technical Director, his involvement in long-range planning for weapons systems, ocean technology, his later work at MIT, work on various committees, and thoughts on naval architecture.

Repositories: MIT, DTRC

Institutions:

David Taylor Model Basin
Marine Science Council
Massachusetts Institute of Technology

National Science Foundation
Naval Ship Research and Development
Center

Other Entries:

Deep submersibles
Long range planning

Ocean technology
Weapons systems

KEIL, DR. ALFRED H.

Interviewer: David K. Allison

Date of Interview: November 2, 1984

Documentation: Tapes, 54 page transcript

Abstract: Dr. Keil discusses his education and wartime work in Germany; subsequent work with British and American scientists; Project Paperclip; research in underwater explosives work; the Ship Protection Group at Norfolk Naval Base; shipshock testing; Polaris missile development and safety; head of ship structures department at DTMB; TD of DTMB; relationship between research and testing roles; laboratory administration; submarine design and hydromechanics; influence on strategic planning; and his son's work at NUSC.

Repositories: DTRC

Individuals Mentioned:

Braun, Wernher von
Bruenhauer, Steve
Johnson, Dr. Gerald

Polacheck, Harry
Saunders, CAPT Harold E.
Wright, RADM Edward Alvey

Institutions:

David Taylor Model Basin
Naval Ordnance Laboratory
Naval Research Advisory Committee

Naval Research Laboratory
Norfolk Shipyard

Other Entries:

Polaris missile
Project Paperclip
Ship protection

Shock testing
Underwater explosives effects

KELLY, CAPT JAMES F.

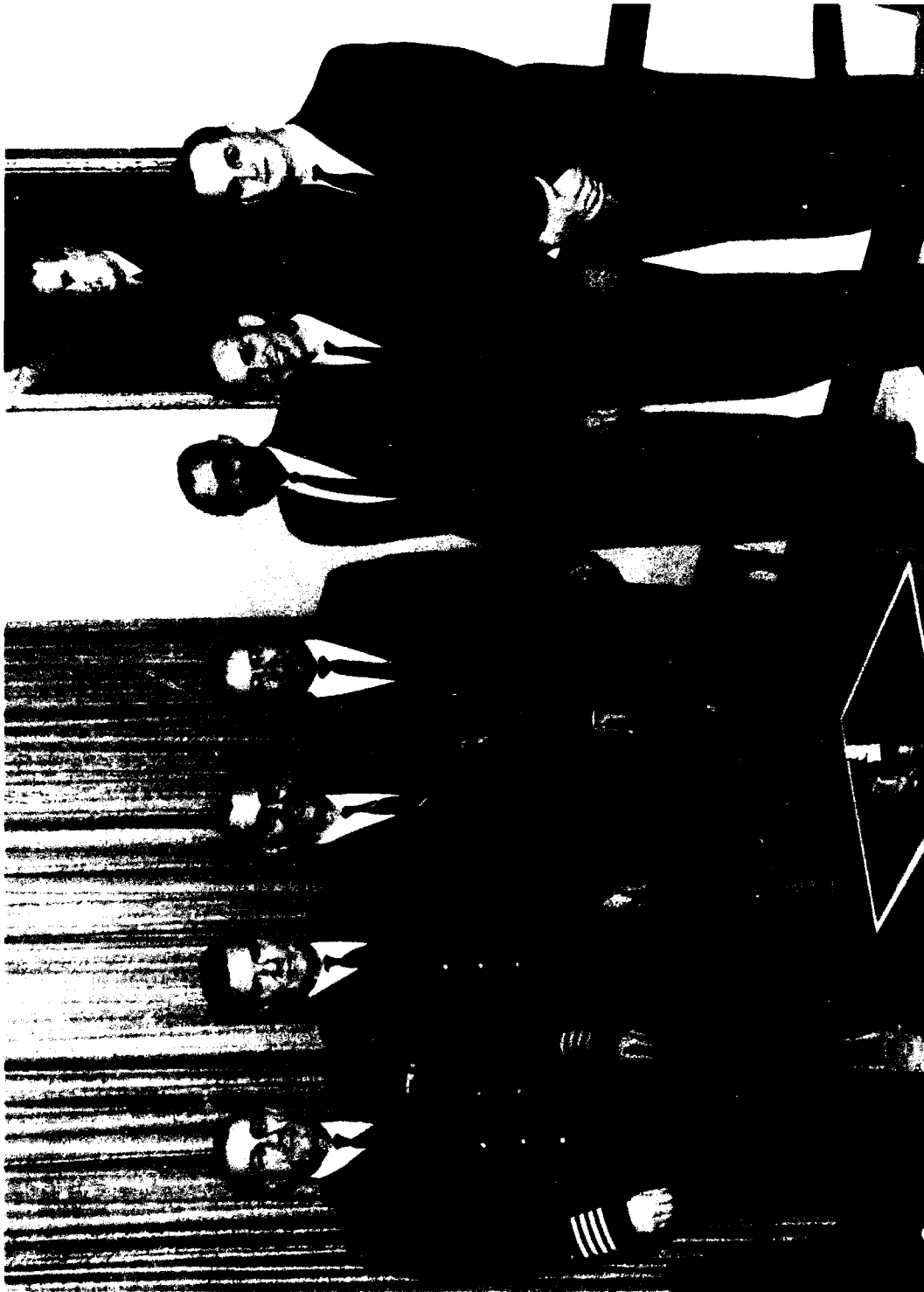
Interviewer: Roger Kempler

Date of Interview: September 22, 1982

Documentation: 32 page transcript, index

Abstract: CAPT Kelly describes his appointment as Commanding Officer of NPRDC, how NPRDC is perceived in Washington, and human factors engineering. He talks about orienting the SYSCOMs, reorganizing NPRDC, and the expansion of NPRDC, the organizational location of NPRDC, and competition for funds with R&D labs. He comments on the possible merger of NOSC and NPRDC, the NAVMAT Inspector General's report on NPRDC, and major contributions of NPRDC over the last ten years.

Repositories: DTRC, NPRDC



DAVID TAYLOR MODEL BASIN TECHNICAL DIRECTORATE, SUMMER 1966

LEFT TO RIGHT: CAPTAIN D. K. ELA, USN, COMMANDING OFFICER AND DIRECTOR;
CAPTAIN D. J. O'MEARA, USN, HEAD, AERODYNAMICS LABORATORY; DR. ALFRED H. KEIL,
TECHNICAL DIRECTOR; DR. WILLIAM E. CUMMINS, HEAD, HYDROMECHANICS LABORATORY;
MR. GENE H. GLEISSNER, HEAD, APPLIED MATHEMATICS LABORATORY;
DR. WILLIAM W. MURRAY, HEAD, STRUCTURAL MECHANICS LABORATORY;
DR. ALAN POWELL, HEAD, ACOUSTICS AND VIBRATION LABORATORY

Individuals Mentioned:

Regan, Dr. James J.
Whittle, ADM Alfred J., Jr.

Institutions:

Naval Material Command
Naval Ocean Systems Center
Navy Personnel Research and Development Center

Other Entries:

Inspector General
Personnel research
Systems commands

KENDIG, DR. PAUL M.

Interviewer: Richard D. Glasow

Date of Interview: February 13, 1980

Documentation: Tapes, transcript

Abstract: Dr. Kendig describes his background and education, and his work at the Harvard Underwater Sound Laboratory and the Applied Research Laboratory.

Repositories: NUM

Individuals Mentioned:

Pielemeier, Dr. Walter H.
Walker, Dr. Eric A.

Institutions:

Applied Research Laboratory/Pennsylvania State University
Harvard University
Underwater Sound Laboratory

Other Entries:

Acoustics research

KIRK, ADM ALAN GOODRICH

Interviewer: Unknown

Date of Interview: 1962

Documentation: 386 page transcript

Abstract: ADM Kirk recalls his career in the Navy, including his education at the Naval Academy, and work at the Naval Proving Ground and the Bureau of Ordnance.

Repositories: COL, NHC

Institutions:
Naval Proving Ground

Subjects:
Ordnance

KISTIAKOWSKY, DR. GEORGE B.

Interviewer: Albert B. Christman

Date of Interview: May 3, 1966

Documentation: 17 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Kistiakowsky discusses the relationship between he and Parsons during the Manhattan Project, Parsons' technical ability, and their conflicts with Dr. Seth Neddemeyer. He comments on Dr. Robert Oppenheimer, problems of procurement for the atomic bomb during wartime, and conflicts between military officers and civilians.

Repositories: NWC, DTRC

Individuals Mentioned:

Bader, Dr. Robert
Neddemeyer, Dr. Seth H.

Oppenheimer, Dr. Robert
Parsons, RADM William S.

Subjects:

Manhattan Project
Military-civilian relationships
Neddemeyer, Dr. Seth

Oppenheimer, Dr. Robert
Parsons, RADM William S.

KISTLER, DR. RICHARD E.

Interviewer: Leroy L. Doig, III

Date of Interview: February 23, 1982

Documentation: Tapes, 36 page transcript, index

Abstract: Dr. Kistler discusses R&D trends at the Center, relationships with Headquarters, automation, the Civil Service Reform Act Personnel Demonstration Project, and NWC management philosophies.

Repositories: NWC, NHC, DTRC

Individuals Mentioned:

Hillyer, Robert
Sorge, Monroe B.

Institutions:

Naval Weapons Center

Other Entries:

Civil Service Reform Act Personnel
Demonstration Project
Naval Weapons Center
R&D management

KISTLER, DR. RICHARD E.

Interviewer: Leroy L. Doig, III

Date of Interview: February 24, 1982

Documentation: Tapes, 34 page transcript, index

Abstract: Special-subject interview prompted by Dr. Kistler's commentary at a retirement presentation and conducted at the request of NWC upper management. Dr. Kistler discusses why people come to work at China Lake, how those reasons may have changed over the years, and why people leave the Center. Topics include "the good old days" at NOTS, the effect of the Commander on the civilian workforce, military-civilian relationships, problems faced by Federal managers, the role of the Center, and inhibitions to productivity within the Federal system.

Repositories: NWC, NHC, DNL

Individuals Mentioned:

Connolly, Bernard F.
Freeman, RADM Rowland G., III
Haff, CAPT William B.
Harris, RADM William L.

Hays, Burrell W.
Hillyer, Robert
Lahr, CAPT John Jude
Sorge, Monroe B.

Institutions:

Naval Weapons Center

Other Entries:

Military-civilian relationships
Office of Personnel Management
Circular A-76
Personnel recruiting and retention

Productivity
R&D management
Shore Requirements, Standards and
Manpower Planning System

KNEMEYER, FRANKLIN H.

Interviewer: Andrew Kilikauskas

Date of Interview: February 20, 1981

Documentation: Tapes, transcript

Abstract: Includes discussion of career, management philosophy; billets, facilities, finances; technical programs with some discussion of Agile, Condor, Bulldog, Polaris; military-civilian and NOTS-Headquarters relationships; NWC's role; and NOTS maturity in the late 1950s and 1960s.

Repositories: NWC

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Guided missiles
Military-civilian relationships
Naval Ordnance Test Station

Other Entries:

Agile Missile	Condor Missile
Bulldog Missile	Polaris Missile

KNEMEYER, FRANKLIN H.

Interviewer: Leroy L. Doig, III

Date of Interview: June 3, 1981

Documentation: Tapes, 29 page transcript

Abstract: Follow-up of February 20, 1981 interview. Includes discussion of ADM Freeman's tour at NWC and his effects; selling projects to the Navy; policy and process of weapons development; technical projects including Agile, BW/CW weapons, Bigeye, Polaris, Diamondback, underwater vehicles; changes in funding RDT&E; purpose of Weapons Planning Group; management relations; capabilities and future of NWC.

Repositories: NWC

Individuals Mentioned:

Freeman, RADM Rowland G., III

Institutions:

Naval Weapons Center

Subjects:

Guided missiles
Naval Weapons Center
Weapons development

Other Entries:

Agile Missile Program	Diamondback Missile
Bigeye Bomb	Polaris Missile
Biological Warfare/Chemical Warfare	Underwater vehicles

KNEMEYER, FRANKLIN H.

Interviewer: Leroy L. Doig, III

Date of Interview: 1984

Documentation: Videotapes, transcript

Abstract: Interview conducted as background material for special project for Electronic Warfare Department.

Repositories: NWC

Institutions:
Naval Weapons Center

Other Entries:
Antiradiation missile
Electronic warfare

KOESSEY, CALVIN

Interviewer: Albert B. Christman

Date of Interview: 1978

Documentation: Tape, 13 page transcript

Abstract: Mr. Koesey talks about his role at the Naval Underwater Systems Center, including R&D work during the Vietnam War. Research topics covered are mine work, harbor defense, and problems of coastal navies. He also discusses laboratory representatives in Vietnam and the Navy's role in Korea.

Repositories: DTRC

Institutions:
Naval Underwater Systems Center

Other Entries:
Mines and mine warfare
Vietnam Laboratory Assistance Program

KRAUSE, DR. ERNST H.

Interviewer: Dr. David H. DeVorkin

Date of Interview: August 10, 1982 and July 1, 1983

Documentation: Tapes, 122 page transcript

Abstract: Dr. Krause talks about his education, training in physics, and interests in nuclear physics and spectroscopy. At NRL during World War II, he worked in the Communications Security Section, optics, and development of pulse guidance systems, and was involved in the interrogation of German missile scientists and Operation Paperclip. He describes the organization of the Rocket-Sonde section, his role in the V-2 program, co-workers, contacts with Federal Contract Research Centers, and his research in cosmic ray physics.

Repositories: NASM

Individuals Mentioned:

Braun, Wernher von
Friedman, Dr. Herbert
Malina, Dr. Frank J.
Pickering, Dr. William H.

Schein, Marcel
Schwinger, Dr. Julian S.
Toftoy, BG Holger N.
Tousey, Dr. Richard

Institutions:

California Institute of Technology
Jet Propulsion Laboratory
Naval Research Laboratory

Subjects:

Cosmic rays
Physics
Space astronomy

Other Entries:

Aerobee Rocket
Cosmic ray research
Dynasoar
Operation Paperclip

Research management
Rocket-Sonde
V-2 Rocket
Viking Rocket

KRON, DR. GERALD EDWARD

Interviewer: Dr. David H. DeVorkin

Date of Interview: May 20, 1978

Documentation: Tapes, 28 page transcript

Abstract: Dr. Kron speaks about his education and background, work at Berkeley and Lick Observatory, World War II at MIT and Caltech, post-war employment, and work at the Naval Observatory.

Repositories: AIP

Institutions:

Naval Observatory

Subjects:

Astronomy

Other Entries:

Photoelectric photometry

KRUTTER, DR. HARRY

Interviewer: Albert B. Christman

Date of Interview: April 1978

Documentation: 1 tape, 23 page transcript

Abstract: Dr. Krutter talks about his background at the Massachusetts Institute of Technology, his arrival at NADC in 1949, and NADC's early chief scientists. He comments on his time as Technical Director from 1956 to 1972, the direction of Navy R&D work, and the Bureau of Aeronautics and later the Naval Air Systems Command. Dr. Krutter discusses the Navy re-organization of 1965-1966, the cooperation between Navy labs, and his reasons for retiring from NADC. He expostulates in particular on the role of the Director of Navy Laboratories and Chief of Naval Material in running the labs and the major accomplishments of NADC.

Repositories: DTRC, NADC

Institutions:

Bureau of Aeronautics
Chief of Naval Material
Director of Navy Laboratories

Naval Air Development Center
Naval Air Systems Command

Subjects:

Chief of Naval Material
Director of Navy Laboratories

Other Entries:

Technical directors

KRUTTER, DR. HARRY

Interviewer: Tom Misa and Ed Todd

Date of Interview: June 28, 1982

Documentation: 2 tapes, 3 page index

Abstract: Dr. Krutter describes his academic background, his time at an NRL field station, and his professorial days at Penn State. He discusses the BUAER consolidation of facilities at Johnsville, Pennsylvania, the NRL field station's switch to becoming the Radar Division of the Aeronautical Electronics and Electrical Laboratory, and projects of the center in the early 1950's. Krutter comments on the formation of the Anti-Submarine Warfare Laboratory in 1958, BUAER's relationship to NADC, and his appointment as chief scientist of NADC in 1956. He talks about center reorganizations, the systems approach, and Navy lab reorganization, in general, from 1965 to 1968. He mentions the Phoenix Missile System, its predecessor, the Eagle Missile System, and the hybrid digital-analog computer, Typhoon. Krutter reflects on the change in the nature of NADC's work and his career as Technical Director.

Repositories: NADC

Individuals Mentioned:

Black, Dr. K. C.
Driggs, Ivan
Gloeckler, Fred W.

McNamara, Robert S.
Tremblay, Harold

Institutions:

Aeronautical Electronics and Electrical
Laboratory
Aeronautical Instruments Laboratory
Aircraft Armament Laboratory

Anti-Submarine Warfare Laboratory
Bureau of Aeronautics
Naval Air Development Center
Naval Research Laboratory

Subjects:

Airborne Early Warning Radar
Antisubmarine warfare (ASW)
Antisubmarine warfare research
Bureau of Aeronautics
Computers

Fire control systems
Missile systems
Naval Air Development Center
Radar
Systems approach

Other Entries:

Airborne height finder
Eagle Missile Project
Phoenix Missile Project

Technical directors
Typhoon Project

KUNZ, D. A.

Interviewer: J. D. Gerrard-Gough

Date of Interview: October 23, 1975

Documentation: 9 page transcript, index

Abstract: Mr. Kunz comments on the Navy's problems with torpedos during World War II and the group put together to solve them. He talks about the Variable-Angle Launcher and acoustic torpedo built at Morris Dam. Kunz describes administration problems at NOTS, his nuclear work and the role of the General Tire and Rubber Company.

Repositories: NWC, DTRC

Individuals Mentioned:

Saylor, William

Institutions:

Naval Ordnance Test Station

Subjects:

Acoustic torpedoes
Torpedoes

Other Entries:

Variable-Angle Torpedo Launcher

LABERGE, DR. WALTER B.

Interviewer: Elizabeth Babcock

Date of Interview: August 31, 1989

Documentation: Transcript, index

Abstract: Dr. LaBerge offers an insider's view of the development of NOTS' famous Sidewinder missile; he discusses the technical innovations and management philosophy of Dr. William B. McLean, key members of the Sidewinder team, the process of "selling" Sidewinder to the Navy and to the Air Force, and the program's impact on Station employees. He remembers fondly the social life of China Lake, particularly the role of LaV McLean in the community's camaraderie. He also discusses the Agile missile briefly, touching on politics and key players. He offers insights into military and civilian relationships, commenting on the importance of an "umbrella of senior Navy support to China Lake" provided by very senior naval officers who had served at NOTS earlier in their careers. He also discusses turning points in his own career, including his return to China Lake from a top management job with Philco-Ford, his brief stay as NOTS Technical Director, and his decision to accept the appointment as Assistant Secretary of the Air Force for Research and Development.

Repositories: NWC

Individuals Mentioned:

Amlie, Dr. Thomas S.
Brown, Dr. Frederick W.
Craft, Chris
Crockett, Sidney
Freeman, RADM Rowland G., III
McLean, Dr. William B.
McLean, LaVerne (LaV)

Moran, VADM William
Parsons, RADM William S.
Schiefer, Gerald
Swift, Dr. I. Henry
Wilcox, Dr. Howard A.
Wilson, Dr. Haskell G.

Institutions:

Air Force
Bureau of Ordnance
Congress

Naval Ordnance Test Station
Naval Weapons Center
Philco-Ford

Other Entries:

Agile Missile Program
Management philosophy
McLean, Dr. William B.
McLean, LaVerne
Military-civilian relationships

Optical maneuvering air-launched
rocket
Sidewinder Missile Project
Technology transfer

LAHR, CAPT JOHN JUDE

Interviewer: Leroy L. Doig, III

Date of Interview: June 10, 14, 1983

Documentation: Tapes, 66 page transcript, index

Abstract: CAPT Lahr reviews his tour at NWC and his first impressions of the "civilian Navy base"; he discusses the essential nature of military-civilian interplay at China Lake, the role of NWC and the other Navy laboratories in National defense, and the Center's contributions to the Fleet. CAPT Lahr comments on several programs, including Skipper, Shrike, ACIMD, HARM, and Sidewinder; he also discusses problems and politics in the acquisition process and the China Lake preference for competition, using Shrike, Sidewinder, and HARM as examples. He discusses the Center's

relationships with the outside-the-gate community, with other agencies involved in managing land and airspace (several conflicts involving land and airspace control and visibility protection arose during his tenure), with animal-protection groups and with Headquarters offices (where he felt there were communications problems). CAPT Lahr further comments on the major issues he faced as Commander, including the fraud/waste/abuse push, encroachment, anti-drug abuse programs, command-status reduction, the CA program, and poor relations with Headquarters. Emphasis is given to the major CA study controversies of 1982-1983 and to the controversy resulting from his decision to expand military random drug searches to all Government quarters--including civilian.

Repositories: NWC

Individuals Mentioned:

Amory, Cleveland
Hays, Burrell W.

Travers, VADM Edward P.
Williams, ADM John G., Jr.

Institutions:

Naval Material Command
Naval Weapons Center

Other Entries:

Acquisition system
Anti-drug abuse program
Commercial Activities Program
Encroachment
Environmental protection

High-Speed Antiradiation Missile (HARM)
Military-civilian relationships
Shrike
Vietnam war, laboratory support

LAND, ADM EMORY S.

Interviewer: Unknown

Date of Interview: 1963

Documentation: 227 page transcript

Abstract: In this interview ADM Land discusses his study at the Naval Academy and MIT, naval architecture, his work in the Bureau of Ships and Bureau of Aeronautics, Harry Guggenheim and air research, his service as Chief of the Bureau of Ships, and shipbuilding for the National Defense Agency.

Repositories: COL, NHC

Individuals Mentioned:

Guggenheim, Harold

Institutions:

Bureau of Aeronautics
Bureau of Ships
Massachusetts Institute of Technology

National Defense Agency
U.S. Naval Academy

Subjects:

Guggenheim, Harold
Naval architecture
Naval construction

LANDWEBER, DR. LOUIS

Interviewer: Seth Hawkins

Date of Interview: October 23, 1983

Documentation: 2 tapes, 30 page transcript

Abstract: Dr. Landweber describes his work at the Experimental Model Basin in the Washington Navy Yard starting in 1932, including coworkers, towing tank conferences, experiments in cable towing and ship rolling, early work by Scott Russell and William Froude, eliminating vibration of submarine periscopes, construction of the model basin at Carderock, and explosives testing.

Repositories: DTRC

Individuals Mentioned:

Froude, William
Hewins, Dr. Lyman
Mumma, RADM Albert G.
Norley, William
Rabinowitz, Leo

Russell, Scott
Saunders, CAPT Harold E.
Schoenherr, Dr. Karl E.
Tase, Johnny
Thorne, George

Institutions:

David Taylor Model Basin
David Taylor Naval Ship Research and Development Center
Experimental Model Basin

Other Entries:

Model testing

LANDWEBER, DR. LOUIS

Interviewer: David K. Allison

Date of Interview: January 22, 1986

Documentation: 4 tapes, 45 page transcript, index

Abstract: Landweber discusses his education at City College of New York during the Depression; his reasons for coming to work for a navy laboratory; his early work at EMB and the DTMB; his WWII work on cavitation, air-water entry, acoustic and pressure mines, and towing cable computations; reflections on change in attitude of Navy towards education of personnel, his reasons for leaving DTMB, and the deficiencies which exist in fundamental research at Navy labs.

Repositories: DTRC

Individuals Mentioned:

Cummins, Dr. William E.
Potter, Murray

Saunders, CAPT Harold E.
Schoenherr, Dr. Karl E.

Institutions:

David Taylor Model Basin
University of Iowa
University of Maryland

Subjects:

Basic research
Hydrodynamics
Mines

Other Entries:

Cavitation
Propeller design
Submarines

LANGENBACH, EARL H.

Interviewer: Albert B. Christman

Date of Interview: March 13, 1978

Documentation: 1 tape, 16 page transcript

Abstract: Mr. Langenbach discusses his time at the Naval Gun Factory and the Navy Yard, during World War II and after, and compares the amount of bureaucracy and the ability to get things done during the war with the postwar period. He talks about problems involved in contracting defense research out, added regulations created for labs by non-R&D oriented people, and the consolidation of the Navy lab system. Langenbach also recommends people for future interviews.

Repositories: DTRC

Individuals Mentioned:

Bennett, Dr. Ralph
Hartmann, Dr. Gregory
Probus, Dr. James H.

Institutions:

Naval Gun Factory
Naval Ordnance Laboratory

Naval Surface Weapons Center
Naval Weapons Laboratory

Other Entries:

Contracting
Laboratory consolidations

LANGSTON, CDR MARVIN

Interviewer: Dr. Joseph Marchese

Date of Interview: March 2, 1990

Documentation: 2 tapes, 40 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. After providing information on his professional background, CDR Langston describes major sections of NAVSEA. He then narrates how specific portions of NAVSEA became concerned, while work was being done on *USS Arleigh Burke* (DDG-51), with integrating its various systems' components. Accordingly, he discusses the establishment of a small special projects office under ADM Meyer in SEA-06 that studied systems engineering. CDR Langston then describes interaction with Harold Kitson regarding the Navy Tactical Data System (NTDS), now called the Advanced Combat Direction System (ACDS), and the AEGIS system. CDR Langston discusses concern at the CNO level regarding battle force information management (BFIM). He elaborates on special Saturday meetings regarding battle force systems engineering as well as on ADM Miller's task force on BFIM. CDR Langston gives his view on the disestablishment of NAVMAT and the establishment of SPAWAR. He also discusses changes in NAVSEA that precipitated his move to SPAWAR. CDR Langston provides information on the organization of SPAWAR 30, the WSA&E Directorate, its organizational development, and initial recruitment for it. CDR Langston tackles issues regarding sponsorship of SPAWAR 30 by OP-094, OP-095, and OP-098 as well as the overall funding structure of Navy and the funding authorization for SPAWAR 30. He then clarifies the roles of ADMs Topping and Batzler in SPAWAR 30. CDR Langston elaborates on the second presentation before the CNO Executive Board (CEB) and the controversy surrounding the program elements presented in that CEB. He provides additional background on problems with funding support as well as the difficulties that SPAWAR's proposals encountered before Congress. CDR Langston discusses efforts to "market" WSA&E and addresses burdens placed on R&D centers in support of WSA&E. He closes with an overview of personnel changes in SPAWAR 30 and provides recommendations for additional interviewees.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
Baggett, VADM Lee
Batzler, RADM Jack
Beecher, RADM John
Brooks, RADM Dennis
Busey, ADM James
Carlsen, RADM Kenneth
Chang, RADM Ming
Clare, Dr. Thomas
Clark, VADM Glenwood
Colvard, Dr. James
Doak, Robert
Fowler, VADM Earl
Gray, Robert
Guilbault, RADM R. G.
Hays, ADM Ronald

Hillyer, Robert
Hogg, ADM James
Holt, CAPT Richard
Kitson, Harold
Latham, Dr. Donald
Meyer, RADM Wayne
Miller, VADM Richard
Mills, James
Pollard, Dr. James R.
Poole, CAPT James
Smith, VADM William
Topping, RADM Robert
Tunstall, Dr. Edward
Tuttle, VADM Jerry
Watkins, ADM James
Wessel, Paul

Institutions:

CNO Executive Board
Federal Aviation Administration
Johns Hopkins University/Applied Physics
Laboratory
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Center
Naval Sea Systems Command
Naval Surface Warfare Center

Office of Naval Acquisition Support
Office of Naval Research
Office of Naval Technology
Office of the Chief of Naval Operations
Office of the Secretary of Defense
RCA Corporation
Space and Naval Warfare Systems Command
Special Projects Office

Subjects:

Advanced Combat Direction System
AEGIS program
Battleforce information management
system
Battleforce systems engineering
Command control, communication, and
intelligence
Command support system
Disestablishment of NAVMAT
Establishment of SPAWAR

Fleet ballistic missile program
Joint Tactical Information
Distribution System
Naval Sea Systems Command
Research and development
Tactical command system
Warfare support system
Warfare systems architecture and
engineering

LASER HISTORY

Interviewer: Dr. David K. Allison

Date of Interview: March 4, 12, 1981

Documentation: 3 tapes

Abstract: This is a series of interviews done to document laser technology at NRL. The interviews consist of descriptions and explanations of individual photographs of equipment. The tapes are keyed to photographs in storage at the Washington National Records Center in Suitland, MD.

Repositories: NRL

Institutions:

Naval Research Laboratory

Other Entries:

Laser history
Laser research

LATHAM, DR. DONALD

Interviewer: Dr. Joseph Marchese

Date of Interview: March 2, 1990

Documentation: 1 tape, 17 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Dr. Latham initially provides his professional background as well as an overview of command control, communication, and intelligence (C3I) efforts in SPAWAR. He also elaborates on the appropriate placing of WSA&E in SPAWAR and the funding problems associated with that program in SPAWAR. Dr. Latham discusses the opinion held by some officials in the Navy of his perceived opposition to a stronger WSA&E as well as the resistance within the Navy to a central WSA&E authority. Dr. Latham details the research and development centers' opposition to controls and gives insight into the relationship between SPAWAR and himself as Assistant Secretary of Defense for C3I specifically regarding WSA&E. He concludes with a brief discussion pertaining to the accomplishment of the MILSTAR communications satellite.

Repositories: DTRC

Individuals Mentioned:

Chu, David	Hogg, ADM James
Cittadino, John	Lehman, John
Clark, VADM Glenwood	Nagler, VADM Gordon
Hillyer, Robert	

Institutions:

Center for Naval Analyses	Naval Research Laboratory
CNO Executive Board	Naval Weapons Center
Defense Communication Agency	Office of the Chief of Naval Operations
Department of Defense	Office of the Secretary of Defense
Johns Hopkins University/Applied Physics Laboratory	RCA Corporation
Marietta Corporation	Space and Naval Warfare Systems Command
Naval Electronic Systems Command	U.S. Air Force
Naval Material Command	U.S. Army
Naval Ocean Systems Center	U.S. Congress

Subjects:

Antisubmarine warfare (ASW)	MILSTAR satellite communications system
Command control, communication, and intelligence	MK 15 Identification, Friend or Foe
Disestablishment of NAVMAT	Nuclear weapons master plan
Distributed time division multiple access	Program analysis and evaluation
Establishment of SPAWAR	Senior Executive Service
Joint Tactical Information Distribution System	Tactical Flag Command Center
	Warfare systems architecture and engineering

LAURITSEN, DR. CHARLES C.
HARDY, CAPT JOHN I.
ROBINSON, K. H.

Interviewer: Unknown

Date of Interview: November 4, 1964

Documentation: 18 page transcript, index

Abstract: This is a transcript of a speech made at the dedication of Weapon Exhibits Center at NOTS in Inyokern, California. Among the topics discussed are RADM Parsons' proximity fuze, the submarine as a menace to U.S. ships, and the United Kingdom's use of submarine detectors. In addition, Lauritsen talks about the establishment of NOTS and its top officers.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:
Burroughs, RADM Sherman E.

Institutions:
National Defense Research Committee
Naval Ordnance Test Station

Other Entries:
Naval Ordnance Test Station
Proximity fuze
Rocket research
Submarine detectors

LAURITSEN, DR. CHARLES C.

Interviewer: Albert B. Christman

Date of Interview: April 1966

Documentation: 28 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Lauritsen discusses his overall impression of Parsons, his early contacts with him, and Parsons' work on the Proximity Fuze Project. In addition, Lauritsen reflects on Parsons' involvement with the Manhattan Project and his early connection with NOTS. He talks about CAPT Burroughs' role at NOTS and British-American scientific cooperation during World War II.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:
Burroughs, RADM Sherman E.
Parsons, RADM William S.
Thompson, Dr. Louis T. E.

Institutions:
California Institute of Technology
Naval Ordnance Test Station
Office of Scientific Research and Development

Other Entries:
Burroughs, RADM Sherman E.
Manhattan Project
Parsons, RADM William S.
Proximity Fuze

LAURITSEN, DR. THOMAS

Interviewer: Albert B. Christman

Date of Interview: June 26, 1969

Documentation: 20 page transcript, index

Abstract: Dr. Thomas Lauritsen comments on his father, Dr. Charles Lauritsen--his allegiance to the U.S., his ability to make decisions, his personal characteristics, and his international outlook. Thomas Lauritsen discusses Nils Bohr, British rocket research, and NDRC and OSRD. He talks about project work at CalTech, propellant problems for rockets, and a disappointing rocket test at Goldstone Lake. He also describes RADM William S. Parsons' influence on Navy R&D and military-civilian relationships, in general.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Bohr, Dr. Nils
Fowler, Dr. William

Lauritsen, Dr. Charles C.
Parsons, RADM William S.

Institutions:

California Institute of Technology
Naval Ordnance Test Station

Other Entries:

Bohr, Dr. Nils
Lauritsen, Dr. Charles C.
Military-civilian relationships

Parsons, RADM William S.
Rocket propellents
Rocket research

LAW, HOWARD

Interviewer: Dr. David K. Allison

Date of Interview: August 12, 1983

Documentation: 2 tapes, 41 page transcript

Abstract: Mr. Law describes his education, military experience in BUORD, work at NWC and the Naval Ordnance Plant in Georgia, and employment in 1965 with BUWEPS in Washington, DC. He comments on the difference between BUWEPS laboratory management and the early days of the DNL organization, his work in 6.5 funding, management styles and changes, "shore establishment realignments"--the consolidations of NSRDC, NOSC, NSWC, and NUSC, the role of the Facilities Division, the FCRCs, program reviews, Corporate Planning, the VLAP and NSAP programs, SHORESTAMPS, and the need for the laboratories to work harder at developing leaders.

Repositories: DTRC

Individuals Mentioned:

Hillyer, Robert
Johnson, Dr. Gerald
Kidd, ADM Issac C., Jr.
Kleback, Thomas

Lawson, Dr. Joel
Probus, Dr. James H.
Smith, Dr. Howard C.
Towle, CAPT Bernard

Institutions:

Bureau of Ordnance
Bureau of Weapons
Director of Navy Laboratories
Federal Contract Research Centers
Naval Ocean Systems Center

Naval Ship Research and Development
Center
Naval Surface Weapons Center
Naval Underwater Systems Center
Systems commands

Other Entries:

Corporate plan
Director of Navy Laboratories
Laboratory consolidations

Navy Industrial Fund
Navy Science Assistance Program
Vietnam Laboratory Assistance Program

LAW, HOWARD

Interviewer: Dr. Joseph Marchese and Dr. Timothy Willard

Date of Interview: May 3, 1988

Documentation: 2 tapes, 24 page transcript

Abstract: This interview was conducted to provide material for a short history of the Office of the DNL. Mr. Law discusses the creation of NAVMAT, the organization of the Office of the DNL, and the creation of that office from existing personnel. There follows a series of discussions of various reorganizations of the DNL office and NAVMAT, 1966 to 1978, and of the disestablishment of NAVMAT in 1985, and the subsequent assignment of the DNL to OCNR and finally to SPAWAR. The interview ends with an assessment by Law of the role, functions, and contributions of the DNL to the Navy's R&D effort.

Repositories: DTRC

Institutions:

Bureau of Ships
David Taylor Research Center
Naval Material Command
Office of Strategic Development

Office of the Chief of Naval Research
Secretary of the Navy
Space and Naval Warfare Systems Command
Systems Commands

Subjects:

Director of Navy Laboratories
Funding
Management of Navy labs
Naval Material Command

Navy Industrial Fund
Role of the Director of Navy
Laboratories
WSA&E

LAW, HOWARD

Interviewer: Dr. Joseph Marchese

Date of Interview: March 22, 1990

Documentation: 1 tape, 25 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Law begins with an extended discussion regarding the placement of R&D centers and the Office of the DNL within the Office of the CNR. He then assesses the strengths and weaknesses of this reorganization. A discourse on Dr. James Colvard's "Haul-Down" report follows. The transfer of R&D centers to SPAWAR is then described. Mr. Law also discusses the centers' and the DNL's preferences, the question of the permanence of the DNL position, the matter of hardware transfers from SPAWAR as a precondition to its management of the R&D centers, and the preferences of the Commanders at the Naval Air Systems Command and the Naval Sea Systems Command. Mr. Law then answers questions concerning the organizational changes that occurred consequent to the transfer of the DNL from the CNR to SPAWAR, and finally returns to the issue of the permanence of the DNL position.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
Batzler, RADM Jack
Busey, ADM James
Clark, VADM Glenwood
Colvard, Dr. James
DiMascio, Dr. A. J.
Doak, Robert
Hogg, ADM James
Lehman, John

Miller, VADM Richard
Mooney, RADM John Bradford
Morton, Gary
Paisley, Melvyn
Rowden, VADM William
Vogt, RADM Larry
Watkins, ADM James
Wilkinson, VADM Joseph, Jr.

Institutions:

Director of Navy Laboratories
Naval Air Systems Command
Naval Material Command
Naval Military Personnel Command

Naval Sea Systems Command
Office of the Chief of Naval Research
Space and Naval Warfare Systems Command

Subjects:

Command control, and communication
Director of Navy Laboratories
Disestablishment of NAVMAT
Establishment of SPAWAR
Hardware transfers

"Haul Down" report
Research and development centers
Research and development, test and evaluation
WSA&E

LAWSON, DR. JOEL

Interviewer: Dr. Samuel Rothman and Mrs. Susan Frutkin

Date of Interview: 1975

Documentation: 2 tapes, 64 page transcript

Abstract: Dr. Lawson comments on his position as Special Assistant for Electronics, and on Robert A. Frosch as ASN (R&D). He talks about becoming Director of Navy Laboratories, his views on the DNL/DLP charter, block funding, and his management objectives. Lawson discusses his role as DNL, competition between the labs, and bringing COs and TDs together. He describes the impact of the consolidation of the labs, the DNL as intercessor between the labs and their resources, and the labs' problems in general. He explains lab budgeting, talks about work that is contracted out, and the relationship between the DNL and the CNO. He comments on the effects of the SYSCOMs losing control of the labs. Also included are sections on Project REFLEX, the effect of numerous studies of the labs, and trends in lab management.

Repositories: DTRC, NHC

Individuals Mentioned:

Foster, Dr. John S.	Morse, Dr. Robert W.
Frosch, Dr. Robert A.	Zumwalt, ADM Elmo
Kidd, ADM Issac C., Jr.	

Institutions:

Assistant Secretary of the Navy (R&D)	Director of Navy Laboratories
Chief of Naval Development	Systems Commands
Chief of Naval Material	
Director of Defense Research and Development	

Subjects:

Block funding	Laboratory consolidations
Contracting	Laboratory management
Director of Navy Laboratories	Project REFLEX
Frosch, Dr. Robert A.	

LEHMAN, JOHN

Interviewer: Dr. Joseph Marchese

Date of Interview: February 27, 1990

Documentation: 1 tape, 17 page transcript, index

Abstract: This interview is one of a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Secretary Lehman discusses the rationale behind the comprehensive organizational changes that he promoted within the Navy's activities of research, development, and acquisition. He also addresses the issue of the creation of the warfare systems architecture and engineering function and assesses its effectiveness to date.

Repositories: DTRC



JOHN F. LEHMAN
SECRETARY OF THE NAVY; FEBRUARY 1981 THROUGH APRIL 1987

Individuals Mentioned:

Busey, ADM James
Clark, VADM Glenwood
Colvard, Dr. James
Hillyer, Robert
Hogg, ADM James
Paisley, Melvyn
Reagan, Ronald

Rumpf, Richard
Trost, ADM Carlisle
Vogt, RADM Larry
Watkins, ADM James
Weinberger, Casper
Wilkinson, VADM Joseph, Jr.

Institutions:

Department of the Navy
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Center

Naval Sea Systems Command
Office of the Chief of Naval Operations
Paine Webber, Inc.
Space and Naval Warfare Systems Command

Subjects:

Antisubmarine warfare (ASW)
C3I
Command of the Seas
Disestablishment of NAVMAT

Establishment of SPAWAR
Research and development
WSA&E

LEHNER, DR. GEORGE F. J.

Interviewer: Leroy L. Doig, III

Date of Interview: December 7, 1984

Documentation: Tape, 27 page transcript, index

Abstract: Dr. Lehner, a long-time management consultant to NWC, discusses his association with Center managers--especially Dr. McLean--and his impressions of the Center's management style and philosophy. The NWC corporate culture, community, military-civilian relationships, and McLean-Wilson combination are major topics. ACCESS RESTRICTED

Repositories: NWC

Individuals Mentioned:

McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Naval Weapons Center

Other Entries:

Management philosophy
McLean, Dr. William B.

Military-civilian relationships
Naval Weapons Center

LEWIS, RUSSELL

Interviewer: Albert B. Christman

Date of Interview: 1978

Documentation: 1 tape, 21 page transcript

Abstract: Mr. Lewis comments on his work with sonar during World War II at New London, CT., his time on the *USS ISLAND*, and the influence of Columbia University and Harvard University scientists on the New London lab. He talks about the consolidation of the New London and Newport labs into NUSC, Navy sonar work at New London in the postwar era and its use in the Fleet, and the labs' role in the Vietnam War.

Repositories: DTRC

Individuals Mentioned:

Clearwater, Walter
Horton, Dr.

Institutions:

Naval Underwater Systems Center

Subjects:

Sonar

Other Entries:

Laboratory consolidations
Vietnam War

LOCKHART, DR. LUTHER

Interviewer: Dr. David K. Allison

Date of Interview: July 3, 10, 1979

Documentation: 4 tapes, 6 page index

Abstract: Dr. Lockhart talks about his background and education, conditions at NRL during World War II, airplane antistatic wicks, lense coatings for binoculars, restructuring of Chemistry Division after the war, research in atmospheric radioactivity, laser research, and work on chemical coatings.

Repositories: NRL

Individuals Mentioned:

Zisman, Dr. William A.

Institutions:

Naval Research Laboratory

Other Entries:

Atmospheric radioactivity
Chemical Coatings
Laser Technology

Polymers
Spectrometry
Spectroscopy

LOCKWOOD, VADM CHARLES A.

Interviewer: Unknown

Date of Interview: 1965

Documentation: 720 page transcript

Abstract: VADM Lockwood recalls his career and developments in submarine technology, including captured German submarines, SQUALUS rescue operations, periscope photography, the inventions of sonar, radar, and nuclear propulsion, and the development of the atomic submarine.

Repositories: COL

Subjects:

Nuclear propulsion
Radar
Sonar

Other Entries:

Atomic submarines
Captured German equipment
USS SQUALUS

LOEB, DR. LEONARD

Interviewer: Albert B. Christman

Date of Interview: March 1967

Documentation: 75 page transcript, index

Abstract: Dr. Loeb discusses his military and scientific background, his time at NPG, and the officers and scientists he worked with. He reflects on his time at NOL and NRL and his World War II assignments. Loeb also comments on RADM William S. Parsons, Dr. Louis T. E. Thompson, and Dr. Ralph Bennett.

Repositories: NWC, DTRC

Individuals Mentioned:

Bennett, Dr. Ralph
Hayward, ADM John T.
Hedrick, CAPT David
Parsons, RADM William S.

Schade, COMO Henry A.
Schuyler, CAPT Michael
Thompson, Dr. Louis T. E.
Tyler, CAPT

Institutions:

Naval Ordnance Laboratory
Naval Proving Ground
Naval Research Laboratory

Other Entries:

Bennett, Dr. Ralph

Ordnance research

Parsons, RADM William S.

Proximity Fuze

Thompson, Dr. Louis T. E.

LYDDANE, DR. RUSSELL H.

Interviewer: Cynthia Rouse

Date of Interview: January 24, 1977

Documentation: 14 page transcript

Abstract: This interview is Chapter VII in Dahlgren, edited by Kenneth G. McCollum. Dr. Lyddane discusses the work environment at Dahlgren, the work of the Naval Gun Factory, ballistics tables, projectile testing, torpedo fuzes, the Computation Laboratory, the Armor and Projectile Laboratory, problems in position classification, the Fleet Ballistic Missile Program, the change in name in 1959 and relationship with NOL, White Oak.

Repositories: NSWC

Institutions:

Naval Gun Factory
Naval Ordnance Laboratory
Naval Proving Ground

Subjects:

Ballistics

Naval Gun Factory

Naval Ordnance Laboratory

Ordnance

Other Entries:

Fleet Ballistic Missile Program

Technical directors

LYON, DR. WALDO U.

Interviewer: CDR Etta-Belle Kitchen

Date of Interview: January 30, 31, and March 6, 1971

Documentation: 297 page transcript

Abstract: A birth-to-present day oral memoir.

Repositories: USNI, USNA, NHC

Individuals Mentioned:

Anderson, CAPT William
Crary, Dr. Albert P.
Frosch, Dr. Robert A.

LaFond, Gene
Munk, Walter

Institutions:

Canadian National Laboratory

Subjects:

Arctic research and development

Other Entries:

Echo-sounding systems
Iceberg sonar tests
QLA System
Sea ice

USS ATULE (SS-403)
USS BOARFISH (SS-327)
USS NAUTILUS (SSN-571)

MACK, DUANE

Interviewer: Albert B. Christman

Date of Interview: January 1969

Documentation: 58 page transcript, index

Abstract: Mr. Mack comments on the first tests at NOTS, the scientists in charge there, and the various test ranges. He talks about how the land was acquired for NOTS, the transition to peacetime work, and NOTS 25 years later.

Repositories: NWC, DTRC

Individuals Mentioned:

Anderson, Dr. Carl
Brown, Dr. Ike
Ellis, Dr. Emory L.

Hayward, ADM John T.
Mathieu, Calvin

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Other Entries:

Naval Ordnance Test Station
Ordnance

Proximity fuze
Rocket research

MARKOWITZ, WILLIAM

Interviewer: Steven Dick

Date of Interview: October 21, 1986 and August 1987

Documentation: Tapes

Abstract: Dr. Markowitz describes his years at the Naval Observatory, 1936 to 1966, including his years as Director of Time Service, 1953 to 1966.

Repositories: USNO

Subjects:

Astronomy
Time service
United States Naval Observatory

MARTELL, VADM CHARLES B.

Interviewer: Booz, Allen & Hamilton

Date of Interview: December 11, 1975

Documentation: 2 tapes

Abstract: VADM Martell was the officer who presided over the creation of BUWEPS, and was later ACNO (R&D) and Deputy CNO (ASW Programs). Martell reminisces about his activities in these areas, and his time on the staff of the Director of Defense, Research and Engineering in the Office of the Secretary of Defense. Also included are memories of early operational testing of missiles during the time Martell was commander of the USS Mississippi.

Repositories: DTRC

Institutions:

Bureau of Aeronautics
Bureau of Naval Weapons
Bureau of Ordnance
Naval Material Command

Navy laboratories
Office of the Chief of Naval Operations
Office of the Secretary of Defense
Polaris program

Subjects:

Antisubmarine warfare (ASW)
Bureau of Weapons
Franke Board
Funding

Missile development
Program management
Research management

MARTEN, WILLIAM H.

Interviewer: Roger Kempler

Date of Interview: June 30, 1982

Documentation: 42 page transcript

Abstract: Mr. Marten describes the creation and organization of the Navy Personnel Research Activity (NPRA) in San Diego, including the early charter of the organization, the type of work performed, and the difficulties with facilities and personnel. Marten then discusses the improvements that occurred during the 1960s in personnel research and reorganization of NPRA as NPRDC, and the difficulties the center had in acquiring facilities, interfacing with Washington, choosing a Technical Director, and the major accomplishments of the center.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Jones, Dr. Earl F.	Sprague, RADM Thomas L.
Price, D. George	Turney, Robert F.
Ramras, Dr. Eugene	Van Swearingen, CAPT Earl K.
Rimland, Dr. Bernard	Zumwalt, ADM Elmo

Institutions:

Bureau of Naval Personnel	Naval Training Center
Construction battalions	Navy Personnel Research and Development Center
Naval Material Command	Navy Research Advisory Committee
Naval Ocean Systems Center	
Naval Personnel Research Activity	

Subjects:

Laboratory management
Laboratory organization
Personnel research

MASTERSON, VADM KLEBER S.

Interviewer: Unknown

Date of Interview: November 1972 and April 1973

Documentation: 493 page transcript, index

Abstract: VADM Masterson served as executive member of the Navy Ballistic Missiles Committee, which played a major role in developing Polaris, Chief of the Bureau of Weapons, and as Director of the Weapons Systems Evaluation Group, OSD.

Repositories: NHC, NWCM, USNA, USNI

Institutions:

Bureau of Weapons	Secretary of Defense
Navy Ballistic Missiles Committee	Weapons Systems Evaluation Group

Subjects:

Ballistic missile submarines	Submarine launched ballistic missiles
Nuclear missiles	Weapons systems
Nuclear powered fleet ballistic missile submarines	

Other Entries:

Bureau of Weapons	Polaris program
Navy Ballistic Missiles Committee	Weapons Systems Evaluation Group, OSD

MAY, CHARLES B.

Interviewer: Elizabeth Babcock

Date of Interview: April 27, 28, 1988

Documentation: 75 page transcript, index

Abstract: Mr. May shares lessons learned from a career in program management and coordination at NWC and its predecessor organization, the NOTS. His brief employment at NOL, Corona, during the time (1967 to 1971) that Corona was being disestablished and its programs transferred to NWC, allows him to make comparisons between the working philosophies of the two organizations and to note the increasing bureaucratization he observed at NWC upon his return. He also discusses the Shrike and HARM programs from the perspective of having been NWC program manager for both programs; he shares insights on relationships with PMAs, other Washington personnel, and contractors. Other topics covered include the genesis of the Design Review Committee, contract management improvement efforts, and the place of the contractor on the design team. Mr. May concludes by summarizing the major strengths and weaknesses of the NWC in the weapons development process.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Corzine, Robert G.

Hays, Burrell W.

Knemeyer, Franklin H.

Mosko, Joe

Riggs, Leroy

Schiefer, Gerald

Vargus, Robert

Institutions:

Naval Ordnance Laboratory, Corona

Naval Ordnance Test Station

Naval Weapons Center

Other Entries:

Carlucci initiatives

Contractors

Design review process

High-Speed Antiradiation Missile (HARM)

Naval Ordnance Laboratory

Naval Weapons Center

Shrike

Systems engineering

Technical Management Certificate
Program

Training for program management

MCBURNETT, GENIE

Interviewer: Dr. Joseph Marchese

Date of Interview: June 18, 1990

Documentation: One tape, 29 page transcript, index

Abstract: This interview is one in a series conducted to gather information about the disestablishment of NAVMAT and the establishment of SPAWAR. Ms. McBurnett provides information on her professional background and also on the historical background of the establishment of SPAWAR. She elaborates on the circumstances which brought her to SPAWAR and defines her understanding of the

meaning of warfare systems architecture (WSA) and warfare systems engineering (WSE). Ms. McBurnett gives a historical backdrop of programs which were precursors to WSA&E and then discusses her role in WSE. She addresses the problems with C3I and describes her group's efforts to develop specifications to define performance boundaries in accordance with interface specifications. Ms. McBurnett provides an overview of WSA&E and assesses the effectiveness of the projects she worked on in both WSE and WSA. She elaborates on the problems related to direct funding as well as the issue of indirect funding for WSA&E. Ms. McBurnett then deals with the issue of WSA&E's placement in SPAWAR and the development of SPAWAR 30. She also considers the possible placement of WSA&E elsewhere including NAVMAT before it was disestablished. Ms. McBurnett evaluates VADM Clark as Commander of SPAWAR, examines Robert Doak's role in SPAWAR, and elaborates on CDR Langston's contributions in WSA&E. She compares the contributions of the Strategic Systems Project Office (SSPO) and the AEGIS program to WSA&E and details the contributions of individuals in SPAWAR 30. Ms. McBurnett addresses RADM Batzler's role as SPAWAR 30 and discusses Dr. Pollard's contributions to WSA&E. She attempts to predict the future of WSA&E and considers the role of the new SPAWAR Commander who is coming from NAVSEA-06. Ms. McBurnett concludes by providing the rationale behind the development of the Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN/RDA).

Repositories: DTRC

Individuals Mentioned:

Ailes, RADM Robert
 Batzler, RADM Jack
 Blose, RADM Larry
 Bodensteiner, RADM Wayne
 Busher, Richard
 Cann, Gerald
 Carlsen, RADM Kenneth
 Clark, VADM Glenwood
 Colvard, Dr. James
 Doak, Robert
 Evans, Clay

Hogg, ADM James
 Langston, CDR Marvin
 Lehman, John
 Paisley, Melvyn
 Pollard, Dr. James R.
 Pyatt, Everett
 Topping, RADM Robert
 Watkins, ADM James
 White, ADM Steven
 Young, Robert

Institutions:

CNO Executive Panel
 Department of Defense
 Department of the Navy
 Naval Air Systems Command
 Naval Electronic Systems Command
 Naval Material Command

Naval Sea Systems Command
 Naval Surface Weapons Center
 Office of the Chief of Naval Operations
 Office of the Secretary of the Navy
 Space and Naval Warfare Systems Command
 Strategic Systems Project Office

Subjects:

Acquisition Category I	Information resource management
AEGIS program	Interface drawings
Battleforce	Langston, CDR Marvin
Batzler, RADM Jack	Packard Commission Report
Clark, VADM Glenwood	Performance specifications
Command control, communication and intelligence	Pollard, Dr. James R.
Disestablishment of NAVMAT	Program Executive Officer
Doak, Robert	Radio electronic battle management
Establishment of SPAWAR	Research, development, test, and evaluation (RDT&E)
Functional subsystems	Systems engineering
Goldwater-Nichols Defense Reorganization	WSA&E

MCCARTHY, VADM PAUL, JR.

Interviewer: Dr. Joseph Marchese

Date of Interview: March 30, 1990

Documentation: 1 tape, 16 page transcript, index

Abstract: This interview is one in a series conducted to gather information about the disestablishment of NAVMAT and the establishment of SPAWAR. VADM McCarthy evaluates the R&D organization in the Navy and the need to coordinate and focus the work of naval laboratories and centers. He also discusses the relative merits of placing the R&D Centers under the CNR, SPAWAR, or the sponsoring systems commands. He also touches on funding for the R&D centers. Furthermore, VADM McCarthy looks at the concept of the full spectrum laboratory, the relationship between the CNR and the systems commands, and the idea of the Secretary of Defense examining the laboratories of all the military services.

Repositories: DTRC

Individuals Mentioned:

Busey, ADM James	Rowden, VADM William
Clark, VADM Glenwood	Schiefer, Gerald
Hunt, William	Tunstall, Dr. Edward
Lehman, John	Weaver, RADM John
Morton, Gary	Whittle, ADM Alfred J., Jr.
Paisley, Melvyn	Wilkinson, VADM Joseph, Jr.
Reed, Jerry	

Institutions:

David Taylor Research Center	Naval Research Laboratory
Johns Hopkins University/Applied Physics Laboratory	Naval Sea Systems Command
Naval Air Development Center	Naval Surface Warfare Center
Naval Air Propulsion Center	Naval Weapons Center
Naval Air Systems Command	Office of the Chief of Naval Operations
Naval Air Test Center	Office of the Chief of Naval Research
Naval Coastal Systems Center	Office of the Secretary of Defense
Naval Electronic Systems Command	Office of the Secretary of the Navy
Naval Material	Pacific Missile Test Center
Naval Ocean Systems Center	Space and Naval Warfare Systems Command
	U.S. Air Force

Subjects:

Antisubmarine warfare (ASW)
Director of Navy Laboratories
Disestablishment of NAVMAT
Engineering versus research in the
Navy's laboratories

Establishment of SPAWAR
Full spectrum laboratories
Research and development
WSA&E

MCDOWELL, RENSLE

Interviewer: Richard D. Glasow

Date of Interview: August 20, 1980

Documentation: Tapes, transcript

Abstract: Mr. McDowell describes his role in acoustics research at the Newport Naval Torpedo Station.

Repositories: NUM

Institutions:

Naval Torpedo Station

Subjects:

Torpedoes

Other Entries:

Acoustics research
Ordnance research

MCKIBBIN, MRS. JOSEPH (DOROTHY)

Interviewer: Albert B. Christman

Date of Interview: January 1967

Documentation: 29 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mrs. McKibbin discusses Parsons' attitude toward the office, his family life, his appearance, and what others thought of him.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Carmondy, Mrs. David
Oppenheimer, Dr. Robert

Parsons, Martha
Parsons, RADM William S.

Subjects:

Manhattan Project

MCLEAN, EDITH LAVERNE (MRS. WILLIAM B.)

Interviewer: William F. Wright

Date of Interview: March 18, 1980

Documentation: 48 page transcript, index

Abstract: Mrs. McLean discusses Dr. William B. McLean's personal habits, social abilities, and relationships with Navy personnel. She describes his work habits, his role in the Sidewinder Missile Project, and his appointment as Technical Director of NWC. Mrs. McLean conveys McLean's feelings on war, in general, and on the use of Sidewinder in Korea and Vietnam. She also talks about McLean's delegation of authority when necessary, particularly to Dr. Haskell G. Wilson.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Korean War	Vietnam War
McLean, Dr. William B.	Wilson, Dr. Haskell G.
Sidewinder Missile Project	

MCLEAN, EDITH LAVERNE (MRS. WILLIAM B.)

Interviewer: Starla E. Hall

Date of Interview: June 17, 1980

Documentation: 38 page transcript

Abstract: Mrs. McLean discusses the personal life of her husband, Dr. William B. McLean, who was the Technical Director of NOTS/NWC and NUC. Included are sections on McLean's relationships with his sons, his hobbies at home, and McLean as a husband. Mrs. McLean comments on life at NOTS, her husband as TD there, and the other scientists that made up the NOTS/NWC team. She talks about their family's move to San Diego, the establishment of NUC, her husband's health, and his interests outside of science and the Sidewinder missile project.

Repositories: DTRC

Individuals Mentioned:

McLean, Jack
McLean, Mark
McLean, Dr. William B.

Institutions:

Naval Ordnance Test Station
Naval Undersea Center
Naval Weapons Center

Subjects:

McLean, Dr. William B.
Naval Ordnance Test Station
Sidewinder Missile Project

MCLEAN, DR. WILLIAM B.

Interviewer: Albert B. Christman

Date of Interview: November 16, 1973

Documentation: 30 page transcript, index

Abstract: Dr. McLean discusses the development of various Naval missile projects at NOTS, including the Sidewinder and Walleye missiles. He describes their tracking and launching methods and the politics involved in developing a missile.

Repositories: NWC, DTRC

Individuals Mentioned:

Crawford, Jack A.
Ward, Dr. Newton E.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Air-to-air missiles
Guided missiles

Other Entries:

Sidewinder Missile Project
Walleye missile project

MCLEAN, DR. WILLIAM B.

Interviewer: Dr. Samuel Rothman and Mrs. Susan Frutkin

Date of Interview: December 12, 1974

Documentation: 2 tapes, 33 page transcript

Abstract: Dr. McLean gives a broad overview of naval laboratories since World War II. First, he comments on the state of NOTS and NOL at the end of World War II. McLean discusses the transfer of the labs to the Chief of Naval Material in 1966, the Sherwin Plan, and changes in the Office of the Director of Navy Laboratories. He talks about the effect Congress has on the labs, NIF

Funding, and Special Project Offices and Project Managers. He also explains the effect of frequent leadership changes on R&D, significant lab problems from 1958 to 1973, and how to evaluate the results of R&D in peacetime. In addition McLean details the effect of civil service regulations on the labs and how to attract qualified civilians to work on military programs.

Repositories: DTRC

Individuals Mentioned:

Hayward, ADM John T.

Kidd, ADM Issac C., Jr.

Lawson, Dr. Joel

Rexroth, John

Sherwin, Dr. Chalmers

Thompson, Dr. Louis T. E.

Institutions:

Chief of Naval Material

Department of Defense Research and
Engineering

Director of Navy Laboratories

Naval Ordnance Laboratory

Naval Ordnance Test Station

Systems Commands

Subjects:

Laboratory management

Navy Industrial Fund

Sherwin Plan

MCLEAN, DR. WILLIAM B.

Interviewer: Albert B. Christman

Date of Interview: July 1975

Documentation: 44 page transcript, index

Abstract: Dr. McLean recalls his first association with NOTS, his work in the Fire Control Laboratory, and the need for the Sidewinder Missile. He details his role in the Sidewinder design, his tenure as Head of Aviation Ordnance, and comments on technical layering at NOTS. McLean remembers his time as Technical Director of NOTS, reflects on the role of a TD, and his management style. McLean states that the laboratory reorganization of 1967 failed and talks about the Navy's future; in particular, the need for more submarines.

Repositories: NWC, DTRC

Individuals Mentioned:

Hussey, VADM George F.

Lauritsen, Dr. Charles C.

Thompson, Dr. Louis T. E.

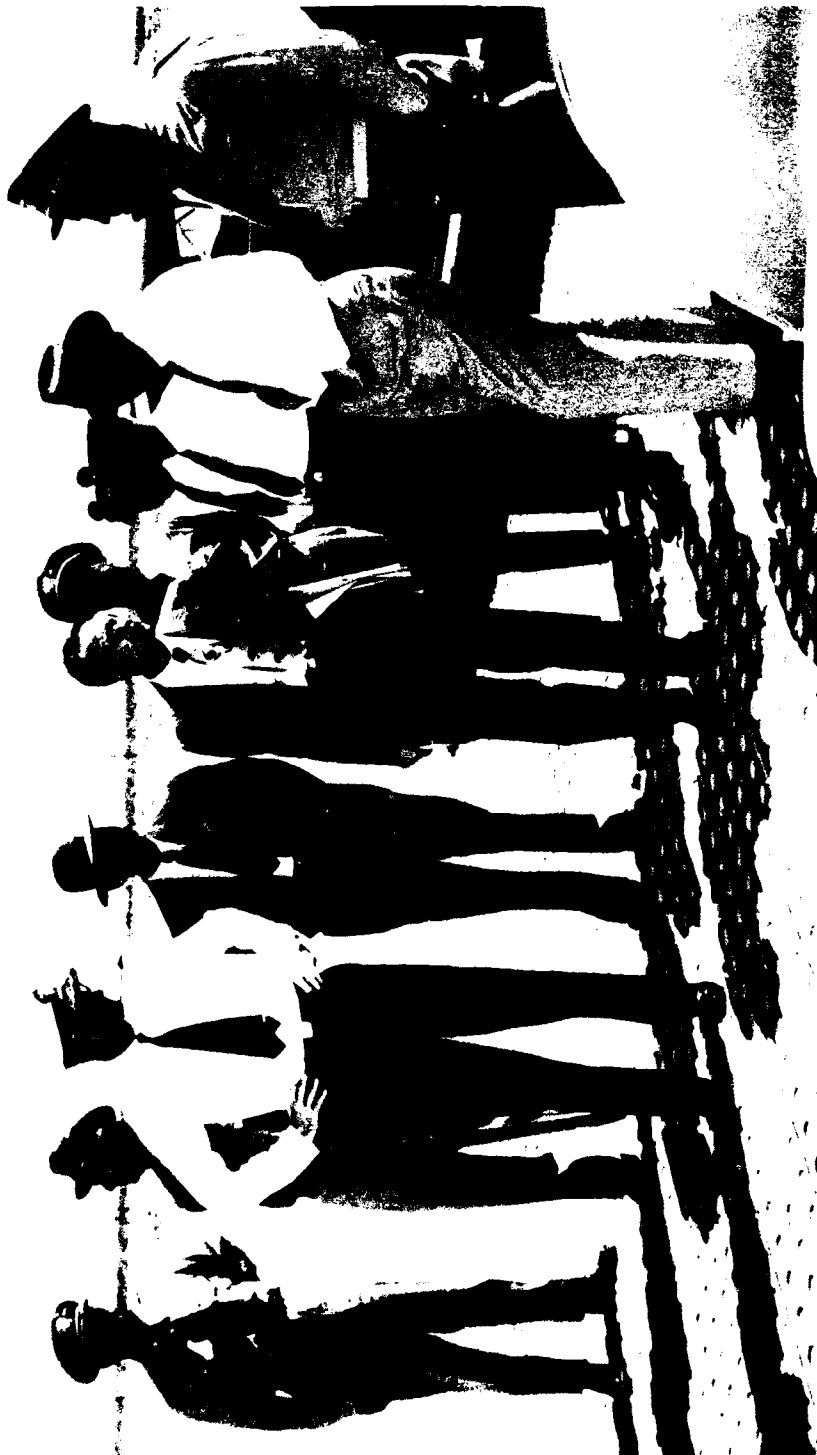
Institutions:

Fire Control Laboratory

Naval Ordnance Test Station

Naval Undersea Center

Naval Weapons Center



MILITARY-CIVILIAN CONFERENCE AT ARMITAGE FIELD, NAVAL ORDNANCE TEST STATION;
 FOURTH FROM LEFT: DR. L. T. E. "TOMMY" THOMPSON, NOTS, TECHNICAL DIRECTOR;
 FIFTH FROM LEFT: DR. WILLIAM B. MCLEAN, HEAD, AVIATION ORDNANCE DEPARTMENT;
 FAR RIGHT: CAPTAIN WALTER V. R. VIEWEG, NOTS, COMMANDER

APRIL 1950

Other Entries:

Naval Ordnance Test Station
Sidewinder Missile Project

Submarine research
Technical directors

MCMILLAN, DR. EDWIN M.

Interviewer: Albert B. Christman

Date of Interview: March 1967

Documentation: 22 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. McMillan describes his and Dr. Robert Oppenheimer's early connections with the Manhattan Project. He reflects on ADM (then CAPT) Parsons' arrival at Los Alamos, NM. and the time he spent working with him. McMillan discusses Parsons' personal character and Parsons' relationship with Oppenheimer.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Groves, LTG Leslie
Oppenheimer, Dr. Robert
Parsons, RADM William S.

Subjects:

Manhattan Project
Oppenheimer, Dr. Robert
Parsons, RADM William S.

MCMILLAN, DR. WILLIAM G.

Interviewer: Glenn E. Bugos

Date of Interview: August 9, 1985

Documentation: 30 page transcript

Abstract: Dr. McMillan was Science Advisor to the Military Assistance Command--Vietnam in the late 1960s, and discusses the creation of that position, his activities while filling it, the staff that supported it and the role allowed the science advisor by Generals Westmoreland and Abrams, and ADM Zumwalt. McMillan reflects on the necessity for quick response to tactical problems by the scientific community, and the ways in which he tried to achieve this in Vietnam. There are several stories used to illustrate McMillan's points, and to illustrate the difficulties he faced in finding funding, in getting the services to accept innovations, and in making the US laboratory community to respond quickly, efficiently and effectively.

Repositories: DTRC

Institutions:

Defense Advanced Research Projects
Agency
Joint Chiefs of Staff

Military Assistance Command--Vietnam
Naval Surface Weapons Center
Navy Science Assistance Program

Subjects:

Funding
Military Assistance Command-Vietnam
Operations analysis
Operations research
Scientific support of tactical needs

METCALF, VADM JOSEPH

Interviewer: Dr. Joseph Marchese

Date of Interview: March 13, 1990

Documentation: 1 tape, 13 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Metcalf initially describes NAVMAT's effectiveness, and the reasons for its disestablishment. He presents his perceptions of the rationale behind the establishment of SPAWAR and the reasons for assigning it the WSA&E function. An extended discussion follows concerning the effectiveness and appropriateness of placing the WSA&E function within a systems command. ADM Metcalf elaborates on the necessity of the function, the type of officer best suited for the job, and the problems encountered in effective implementation.

Repositories: DTRC

Individuals Mentioned:

Kidd, ADM Isaac C., Jr.
McKalliss, ADM Frederick

Paisley, Melvyn
Whittle, ADM Alfred J., Jr.

Institutions:

Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Space and Naval Warfare Systems Command

Subjects:

AEGIS program
Antiair warfare
Disestablishment of NAVMAT

Establishment of SPAWAR
Platform perspective
WSA&E

METZEL, RADM JEFFREY

Interviewer: Dr. Joseph Marchese

Date of Interview: July 17, 1989

Documentation: 1 tape

Abstract: This interview is one of a series conducted to gather material for a history of the MK 48 Torpedo development program. ADM Metzel describes his background and assignments, and especially his time as Program/Project Manager for the MK 48 Mod 0 and Mod 2 Torpedoes, from 1967 to 1971. Metzel details the state of the program when he took over and the developments that occurred during his tenure, including the reinvolvement of the Clevite Corporation, difficulties experienced by the Westinghouse Electric Company, the testing of the two designs, the involvement of the Department of Defense in selecting the Clevite design, and the reasons that the Westinghouse design was not chosen. Metzel also describes some of the ancillary benefits of the program and the lessons learned in terms of engineering development, project management and cost-type contracting.

Repositories: DTRC

Institutions:

Applied Research Laboratory/Pennsylvania State University	Navy Ordnance Laboratory
Clevite Corporation	Office of the Chief of Naval Operations
Naval Material Command	Westinghouse Electric Company

Subjects:

Antisubmarine/ship warfare	Prototypes
Clevite Corporation	Technical direction
Engineering development	Technology Assessment Phase
Fixed-cost versus cost-plus contracting	Testing conditions
Homing systems	Torpedo development
MK 48 torpedo program	Torpedo exploders
Project management	Westinghouse Electric Company

MEYER, RADM WAYNE

Interviewer: Dr. Joseph Marchese

Date of Interview: April 30, 1990

Documentation: 3 tapes, 58 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Meyer begins the interview by providing a review of his professional background prior to 1970 and then details his career since 1970 in which he was largely involved in the AEGIS program. RADM Meyer discusses the relevant context within the Navy which led to the establishment of the AEGIS program and describes how the Navy's experiences in World War II with air defense set the foundation for what later became systems engineering in the AEGIS program. He describes the relationships among research, engineering and production as well as the limits technology places on any environment. RADM Meyer elaborates on the effect the sinking of the Israeli ship *Eilat* had on ship defense systems and how the AEGIS fleet was built in response to the build-up of the strike missile capability of the Soviet fleet. RADM Meyer defines the AEGIS program philosophy; describes the four types of warfare, and discusses the role of the anti-air warfare (AAW) fleet in terms of the elements which dominate AAW. RADM Meyer expounds on the roles of NAVMAT and of the naval bureaus and provides his vision of how NAVMAT might have been the Navy's architectural leader. He elaborates on his role in antimissile warfare and digresses to discuss the

issue of ARM. RADM Meyer provides the definition of the three basic functions of warfare as well as the definitions of the five cornerstones of warfare design. He deals with the problems of carrying out area defense and provides insight into the development of the standard battle group. RADM Meyer describes how the AEGIS program introduced integration across a broad spectrum of systems and discusses how a ship is organized as well as the organization of a battle group. He compares the Chief of Naval Material (CNM) with the CNO and provides organizational comparisons between NAVMAT and the Office of the CNO (OPNAV). RADM Meyer elaborates on the need that existed to reorganize NAVMAT and describes the disestablishment of that command. RADM Meyer reflects on the effect the above actions had on the careers of the three senior Engineering Duty Officers (EDOs) in the Navy and then evaluates the effectiveness of the creation of SPAWAR. RADM Meyer provides his opinion on the outcome of the reorganization of the Director of Naval Warfare, OP-095 into Deputy CNO for Naval Warfare, OP-07, and the effect all these changes had on command and control. He discusses the further deterioration of the situation caused by the changes of senior naval officers. RADM Meyer also elaborates on the earlier efforts in NAVMAT to establish some form of WSA&E and provides insight into his involvement while he was in NAVSEA as Deputy Commander for Weapons and Combat Systems Directorate, SEA-06. RADM Meyer deals with the question of support in OPNAV and the effect the SECNAV's actions had on support in OPNAV for WSA&E. He expounds on the problems encountered by COMSPAWARSYSCOM as the potential director of coordination of top-level warfare requirements (TLWRs) across systems commands and the effect personalities had on the WSA&E program. RADM Meyer discusses the problems SPAWAR encountered regarding funding for WSA&E. He also elaborates on the effect the Goldwater-Nichols Defense Department Reorganization Act has had on the naval organization and how it also has impacted on the issue of the flow of funds. RADM Meyer also gives his opinion of the effect Goldwater-Nichols has had on the role of the CNO as well as its effect on the organization of the Joint Chiefs of Staff (JCS). RADM Meyer concludes by considering other possible interviewees, especially James Mills.

Repositories: DTRC



REAR ADMIRAL WAYNE MEYER
PROJECT MANAGER, AEGIS SHIPBUILDING, JULY 1975 - SEPTEMBER 1983;
DEPUTY COMMANDER OF WEAPONS AND COMBAT SYSTEMS,
SEPTEMBER 1983 - DECEMBER 1985

Individuals Mentioned:

Atwood, Donald
Baggett, VADM Lee
Betti, John
Bodensteiner, RADM Wayne
Burke, ADM Arleigh A.
Cann, Gerald
Cheney, Richard
Christman, Albert B.
Clare, Dr. Thomas
Clark, VADM Glenwood
Colvard, Dr. James
Doak, Robert
Doyle, VADM James
Flaherty, John
Gorshkov, Sergei
Hayward, ADM Thomas
Hekman, VADM Peter
Hill, Robert
Hillyer, Robert
Hogg, ADM James
Holloway, RADM Lowell
Johnson, ADM Gerald
Kidd, ADM Isaac C., Jr.

Lehman, John
McBurnett, Genie
McKee, VADM Kenneth
Meinig, RADM George
Mills, James
Mustin, RADM Henry
Nyquist, VADM John
Paisley, Melvyn
Patton, CAPT James
Pyatt, Everett
Reich, VADM Eli T.
Roosevelt, Franklin D.
Rowden, VADM William
Rule, Gordon
Sansone, RADM Joseph
Tuttle, VADM Jerry
Watkins, ADM James
Weaver, RADM John
Webber, VADM James
White, ADM Steven
Whittle, ADM Alfred J., Jr.
Wittington, ADM Frederick

Institutions:

American Society of Naval Engineers
Bureau of Naval Aeronautics
Bureau of Naval Ordnance
Bureau of Naval Ships
Bureau of Supplies and Accounts
Bureau of Yards and Docks
General Electric Corporation
Joint Chiefs of Staff
Massachusetts Institute of Technology
Military Sealift Command
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Naval Supply Systems Command
Naval Surface Missile Engineering
Station
Naval Surface Warfare Center
Office of the Chief of Naval Operations
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command
Special Projects Office
University of Kansas
University of Texas
Washington University
Wayne Meyer Corporation

Subjects:

Advanced Surface Missile System	Impulse system
AEGIS program	Jamming devices
Antiair warfare	Kamikazis
Antimissile warfare	Komar boats
Antiradiation missile	Missiles
Antisubmarine warfare (ASW)	Multimission warfare
Antisurface warfare	National Command and Control System
Area defense	Phalanx gun
Arleigh Burke fleet	Program Executive Officer
Battleforce level architecture and engineering	Reconnaissance, Electronic Warfare, Special Operations, and Intelligence Evaluation (REWSON) Program
Bicameral organization	Robots
Chief of Naval Material	Soft kill weapons
Chief of Naval Operations	Technical architecture
Countermeasures	Top-level battle force warfare requirements
Decision Coordinating Paper 16	Top-level warfare requirements
Disestablishment of NAVMAT	Transistors
Electronic warfare	U-boats
Establishment of SPAWAR	Warfare systems architecture engineering
Fighting molecule	
Force-pervasive	
Gulf of Tonkin, Komar boat attack	
Impulse cycle	

MEYERS, WESLEY W.

Interviewer: Cynthia Rouse

Date of Interview: December 1, 1976

Documentation: 13 page transcript

Abstract: This interview is Chapter VIII of Dahlgren, edited by Kenneth G. McCollum. Mr. Meyers discusses the Manhattan Project and the part Dahlgren and Dahlgren personnel played, the "Sewer Pipe" bomb, testing of atomic projectiles (the Elsie Project), security of atomic devices, and dropping the test bombs.

Repositories: NSWC

Institutions:
Naval Proving Ground

Other Entries:
Atomic weapons
Elsie Project
Manhattan Project

MIDDENDORF, J. WILLIAM, III

Interviewer: Dr. Joseph Marchese

Date of Interview: March 12, 1990

Documentation: 1 tape, 10 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Ambassador Middendorf praises the overall structure and effectiveness of the Navy's material establishment during his tenure as Secretary of the Navy. Similarly, he evaluates the performance of the Navy's research and development centers, and their interaction with the systems commands and NAVMAT, as "superb." An assessment of Secretary John Lehman's "radical restructuring" of the contract system, and of his decision to disestablish NAVMAT follows. In conclusion, Ambassador Middendorf describes the problems and successes of his attempt to rebuild the Fleet.

Repositories: DTRC

Individuals Mentioned:

Carter, Jimmy

Claytor, W. Graham

Ford, Gerald

Hidalgo, Edward

Kidd, ADM Isaac C., Jr.

Lehman, John

McNamara, Robert S.

Reagan, Ronald

Institutions:

Department of Defense

Naval Air Systems Command

Naval Electronic Systems Command

Naval Material Command

Naval Sea Systems Command

Research and development centers

U.S. Congress

Subjects:

Bidders (ship building)

Budgets

Contracting system

Cost overruns

Disestablishment of NAVMAT

Establishment of SPAWAR

MIKESELL, ALFRED

Interviewer: Steven J. Dick

Date of Interview: August 1988

Documentation: Tapes

Abstract: Mr. Mikesell describes his years at the Naval Observatory, c. 1933 to 1973.

Repositories: USNO

Subjects:

Astronomy

MILLER, VADM GERALD E.

Interviewer: Dr. John T. Mason, Jr.

Date of Interview: January 27, February 19, March 22, April 14, May 5 and 9, June 2, July 7, and October 4, 1976

Documentation: 793 page transcript

Abstract: A birth-to-present day oral memoir, concentrating on the admiral's 38-year naval career.

Repositories: USNI, USNA, NHC, NWC

Individuals Mentioned:

Holloway, ADM James L.

Subjects:

Development of carrier night flying techniques

Development of computers for Navy use

MILLER, LAYMON N.

Interviewer: Richard D. Glasow

Date of Interview: August 21, 1980

Documentation: 2 tapes, transcript

Abstract: Mr. Miller talks about his work in acoustics and torpedo quieting at the Ordnance Research Laboratory.

Repositories: NUM

Institutions:

Ordnance Research Laboratory/Pennsylvania State University

Subjects:

Torpedoes

Other Entries:

Acoustics research

MILLER, VADM RICHARD

Interviewer: Dr. Joseph Marchese

Date of Interview: April 17, 1990

Documentation: 1 tape, 27 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. VADM Miller initially discusses NAVMAT's disestablishment, distinguishing between

the official and actual reasons. He then discusses the establishment of the Office of Naval Acquisition Support. Discourses on the transition from the Naval Electronic Systems Command to SPAWAR and the genesis of WSA&E follow. Finally, VADM Miller provides information regarding the placement of research and development centers within SPAWAR.

Repositories: DTRC

Individuals Mentioned:

Bodensteiner, RADM Wayne
Busey, ADM James
Cann, Gerald
DiMascio, Dr. A. J.
Hays, ADM Ronald
Hogg, ADM James
Lehman, John
Meyer, RADM Wayne

Mooney, RADM John Bradford
Paisley, Melvyn
Pyatt, Everett
Rickover, ADM Hyman
Rowden, VADM William
White, ADM Steven
Wilkinson, VADM Joseph, Jr.

Institutions:

Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Sea Systems Command

Office of Naval Acquisition Support
Office of Naval Research
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command

Subjects:

AEGIS program
Disestablishment of NAVMAT
Establishment of SPAWAR
"Haul Down" report

Naval Electronic Systems Command
Office of Naval Acquisition Support
Research and development centers

MILROY, RICHARD

Interviewer: C. E. Nowicke

Date of Interview: July 10, 1985

Documentation: 2 tapes, index

Abstract: Milroy discusses his background, education, and eventual arrival at David Taylor, where he worked on the design of quiet valves for submarines, and later on quiet pumps. The interview provides a wealth of information on the specific stages of development of valves and pumps at DTRC.

Repositories: DTRC

Institutions:

Aerco
Bendix Corporation
Chemco Company
Control Components, Inc.
Coors Ceramics

David Taylor Naval Ship Research and
Development Center
General Dynamics Electric Boat Division
Hydrasearch Company

Subjects:

Acoustics	Hydromechanics
Cascade Orificial Resistance Device	Quiet valves
Columnated Hole Structure	Sanders valves
Hydraulics	

MOONEY, RADM JOHN BRADFORD

Interviewer: Dr. Joseph Marchese

Date of Interview: April 17, 1990

Documentation: 1 tape, 28 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Mooney initially provides information on his professional background. He then explains why, when NAVMAT was disestablished, the research and development centers were moved under him as CNR and not under the systems commands. He also discusses the funding and roles of the university laboratories. He evaluates the effectiveness of the R&D centers and the DNL under the CNR and elaborates on the move of the centers from the CNR to SPAWAR and the rationale behind Dr. Colvard's proposal for such a move. RADM Mooney discusses the management problems encountered by VADM Clark when he went from SPO to SPAWAR and provides insight into the leadership problems with the office of the DNL. He addresses Robert Doak's role in SPAWAR. Finally, RADM Mooney assesses the CNR's effectiveness dealing with the problems of the R&D centers and states how the perceptions of the R&D centers towards his office gradually changed as time elapsed.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert	Hunt, William
Berman, Dr. Alan	Lehman, John
Busey, ADM James	McCarthy, VADM Paul, Jr.
Clark, VADM Glenwood	Morton, Gary
Colvard, Dr. James	Paisley, Melvyn
Doak, Robert	Reed, Jerry
Hays, Burrell W.	Watkins, ADM James
Hillyer, Robert	Wolkensdorfer, RADM Daniel
Hogg, ADM James	

Institutions:

Applied Research Laboratory/Pennsylvania State University	Naval Sea Systems Command
Harvard Branch Oceanographic Institute	Naval Weapons Center
Johns Hopkins University/Applied Physics Laboratory	Office of Naval Acquisition Support
Marine Physical Laboratory	Office of Naval Research
National Science Foundation	Office of Naval Technology
Naval Air Systems Command	Office of the Chief of Naval Operations
Naval Electronic Laboratory Center	Office of the Chief of Naval Research
Naval Electronic Systems Command	Scripps Institute of Oceanography
Naval Material Command	Space and Naval Warfare Systems Command
Naval Ocean Systems Center	University of New Hampshire/Marine Systems Engineering Laboratory



REAR ADMIRAL JOHN BRADFORD MOONEY
CHIEF OF NAVAL RESEARCH AND CHIEF OF NAVAL TECHNOLOGY
JULY 1983 TO AUGUST 1987

Subjects:

Antisubmarine warfare (ASW)
Director of Navy Laboratories
Disestablishment of NAVMAT
Doak, Robert
Establishment of SPAWAR
Fleet ballistic missiles
"Haul Down" report

Independent research/independent
exploratory development
Technical directors
Top-level warfare requirements
Warfare systems architecture and
engineering

MORAN, VADM WILLIAM

Interviewer: CAPT Robert L. Hansen

Date of Interview: 1975

Documentation: 1 tape, 31 page transcript, index

Abstract: VADM Moran comments on his relationships with various ASN (R&D)s, changes in the relationship between the ASN (R&D) and OPNAV, and ADM Zumwalt's use of the CNO Executive Board. He recalls his time at NOTS and talks about the shift of lab control to the CNM, the roles of CO's and TD's, and the Navy's success in working with civilians. Moran discusses his tenure as Director of the Office of RDT&E, particularly the need to increase interaction with the DCNM's Office, the Ordnance Systems Command's ability to respond to new requirements, and the layering of management in Navy R&D.

Repositories: DTRC

Individuals Mentioned:

Foster, Dr. John S.
Zumwalt, ADM Elmo

Institutions:

Defense Systems Acquisition Review Council
Naval Ordnance Systems Command

Subjects:

Assistant Secretary of the Navy (R&D)
Commanding Officers
Laboratory management
Military-civilian relationships
Office of the Chief of Naval Operations

Research, development, test, and
evaluation (RDT&E)
Technical directors
Zumwalt, ADM Elmo

MORTON, GARY

Interviewer: Steven Boster

Date of Interview: September 5, 1985

Documentation: 9 page transcript

Abstract: Mr. Morton discusses the impact of the Navy's recent reorganization on the laboratory community, and concludes that it changed little. However, he does state that the individual laboratories gained more

control of program formulation and execution, by virtue of block funding. He stresses the importance of communication between R&D centers and the systems commands. Further, he speculates on the potential conflicts between R&D centers and the program managers and how these problems are related to matrix organization. Mr. Morton also offers suggestions concerning the best way for R&D centers to function within a block funding system. Finally, he concludes that the reorganization has had a positive impact on the laboratory community.

Repositories: NWC, DTRC

Individuals Mentioned:

Clark, VADM Glenwood
Hays, Burrell W.

Mooney, RADM John Bradford
Paisley, Melvyn

Institutions:

Johns Hopkins University/Applied Physics
Laboratory
Naval Air Development Center
Naval Material Command
Naval Ocean Systems Center

Naval Sea Systems Command
Office of Naval Acquisition Support
Office of Naval Technology
Research and development centers
Space and Naval Warfare Systems Command

Subjects:

Block funding
Matrix organization

Navy reorganizations
Program managers

MORTON, GARY

Interviewer: Dr. David K. Allison

Date of Interview: December 20, 27, 1985

Documentation: 5 tapes, transcript

Abstract: Morton was DNL, 1984 to 1985, during the NAVMAT disestablishment and assignment of the Navy's laboratories to OCNR, and begins the interview with a detailed discussion of his selection for that post. Morton discusses at length his interaction with his superiors, the politics of the Naval Material Establishment, and the command structure over the DNL during his tenure. Morton also talks about the ideal organization for Navy laboratory community, and the relationships between the R&D Centers and the Systems Commands. According to Morton, the R&D Centers now embody the only technical competence of the Systems Commands, which have become solely contract management organizations. Morton sees the work the R&D Centers do in the technology base as the only part of them the SYSCOMS have not taken over. Morton argues that SPAWAR has the key role of ensuring the interoperability of the systems produced by the R&D Centers, and that SPAWAR is hamstrung by being a command at the same level as the other SYSCOMS. The dissolution of NAVMAT caused a diminution of influence for the DNL, who was then reporting to a two-star admiral where he had reported to a four-star before.

Repositories: DTRC

Individuals Mentioned:

Berman, Ann
Blood, Dr. Howard
Busey, ADM James
Colvard, Dr. James

Hays, Burrell
Hillyer, Robert
Paisley, Melvyn
White, ADM Steven

Institutions:

Director of Navy Laboratories
Johns Hopkins University/Applied Physics
Laboratory
Naval Material Command
Naval Material Establishment
Naval Ocean Systems Center

Naval Weapons Center
Office of the Chief of Naval Research
R&D Centers
Senior Executive Service
Space and Naval Warfare Systems Command
Systems Commands

Subjects:

Contractors
Director of Navy Laboratories
Disestablishment of NAVMAT
Establishment of SPAWAR
Politics within the Naval Material
Establishment

Program managers
Quality of R&D center personnel
System interoperability
Technical competence

MORTON, GARY

Interviewer: Dr. Joseph Marchese

Date of Interview: February 22, 1990

Documentation: 2 tapes, 45 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Morton initially discusses the causes of the disestablishment of NAVMAT and the rationale behind the establishment of SPAWAR. He describes the genesis of the SPAWAR concept as well as the evolution of the concepts of warfare integration. Mr. Morton provides insight into the efforts of ADM Williams, CNM, to elevate the position of the DNL. He also elaborates on the organizational changes in MAT-08. Mr. Morton then interprets Secretary Lehman's motivations regarding the disestablishment of NAVMAT and other naval matters. He also describes the difficulties that arose between the Assistant Secretary of the Navy for Research, Engineering, and Systems (ASN/RES) and the DNL. Mr. Morton then discusses the relationship between himself and ADM Meyer and ADM Meyer's influence on Dr. Colvard's thinking regarding WSA&E. He provides insight into alternatives to the disestablishment of NAVMAT and elaborates on the mission of Director of Naval Warfare (OP-095) vis-a-vis NAVMAT as well as the functions of WSA&E Directorate (SPAWAR 30) relative to those of OP-095. Mr. Morton details VADM Miller's study on C3 and highlights Dr. Colvard's influence in organizational changes. He addresses the perceived relationship between SPAWAR and the other systems commands as well as the issue of downgrading the position of COMSPAWARSYSCOM from a three star billet to a two star billet. Mr. Morton provides his perceptions of SPAWAR after he left as DNL; discusses a variety of issues with which VADM Clark, the first COMSPAWARSYSCOM, had to deal with; and then indicates how the admiral's personality affected the role SPAWAR played. Mr. Morton then tackles the issue of funding for the WSA&E function and how it was affected by the departure of top level proponents of WSA&E from the Navy. He discusses the

attitudes of other systems command commanders toward WSA&E. Mr. Morton also provides details about the placement of the R&D centers under the CNR, the relationships between the centers and the CNR, and his perception that the arrangement did not work. He describes the influence of Dr. Colvard and his "Haul Down" report on top level planners. Mr. Morton discusses ADM Busey's role in the Navy's material establishment. Mr. Morton then questions the effectiveness of SPAWAR's management of WSA&E before examining the continuing problem of the proper placement of the R&D centers. He examines ADM Clark's background in SPO prior to taking command of SPAWAR before detailing the professional relationship between ADM Clark and Mr. Doak in SPAWAR. Mr. Morton concludes by outlining RADM Weaver's various roles in SPAWAR, stressing especially his positive influence, and discussing the complexities of writing a history of a systems command.

Repositories: DTRC

Individuals Mentioned:

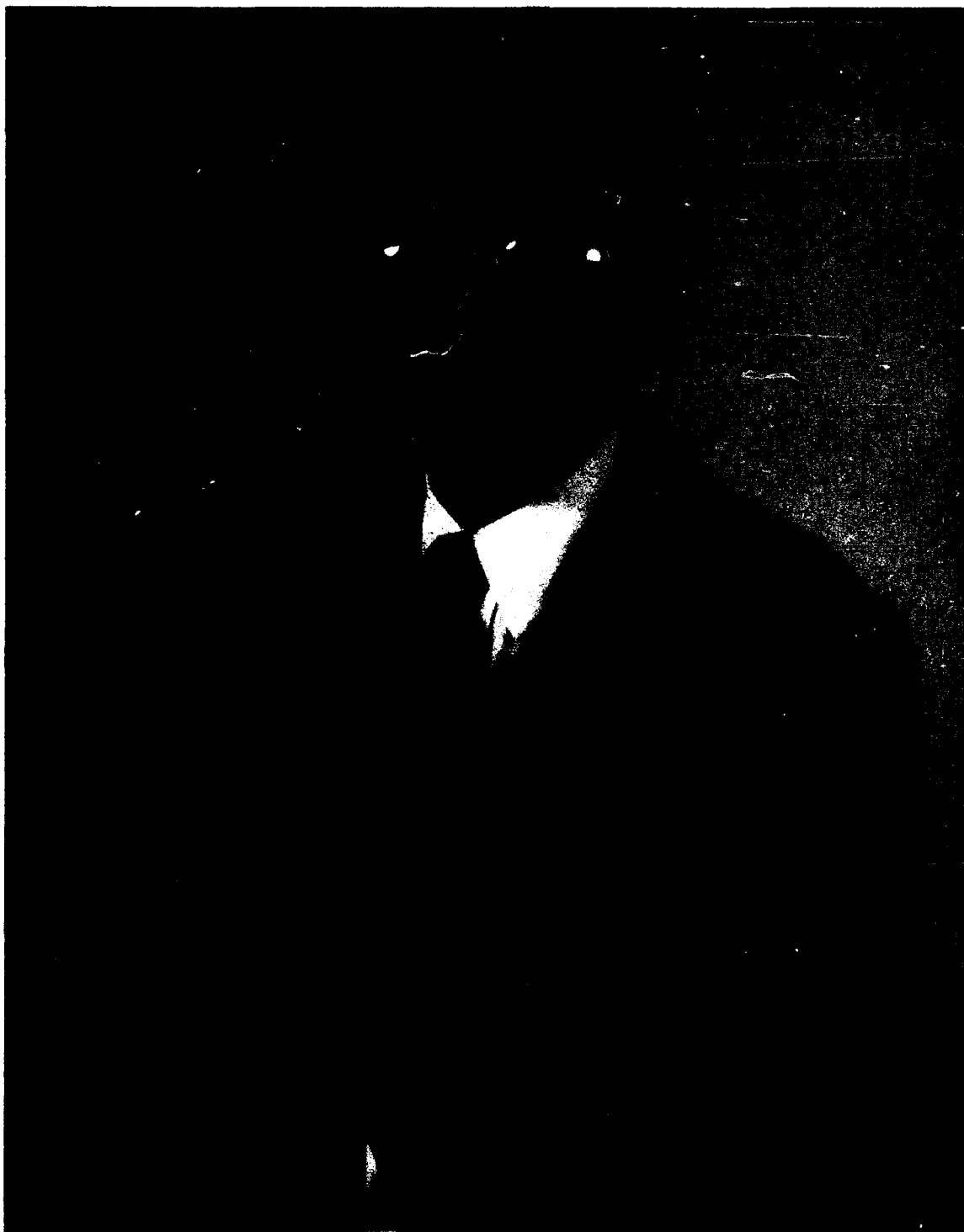
Baciocco, VADM Albert
 Batzler, RADM Jack
 Busey, ADM James
 Cann, Gerald
 Clark, VADM Glenwood
 Colvard, Dr. James
 Curtis, RADM Guy
 DiMascio, Dr. A. J.
 Doak, Robert
 Hardistey, ADM Huntington
 Hillyer, Robert
 Hogg, ADM James
 Lehman, John
 McCarthy, VADM Paul, Jr.
 Meyer, RADM Wayne
 Miller, VADM Paul
 Miller, VADM Richard

Mooney, RADM John Bradford
 Paisley, Melvyn
 Probus, Dr. James H.
 Reagan, Ronald
 Rickover, ADM Hyman
 Rowden, VADM William
 Smith, VADM Levering
 Solomon, Dr. Louis
 Travers, VADM Edward P.
 Trost, ADM Carlisle
 Vogt, RADM Larry
 Watkins, ADM James
 Weaver, RADM John
 White, ADM Steven
 Whittle, ADM Alfred J., Jr.
 Wilkinson, VADM Joseph, Jr.
 Williams, ADM John G., Jr.

Institutions:

Bureau of Naval Weapons
 Center for Naval Analyses
 Federal Aviation Administration
 Johns Hopkins University/Applied Physics
 Laboratory
 Laurel Electro-Optical Systems Company
 Naval Air Systems Command
 Naval Electronic Systems Command
 Naval Material Command
 Naval Research Laboratory
 Naval Sea Systems Command

Naval Studies Board
 Naval Surface Warfare Center
 Naval Underwater Systems Center
 Naval War College
 Office of Naval Acquisition Support
 Office of Naval Research
 Office of the Chief of Naval Operations
 Office of the Chief of Naval Research
 Office of the Secretary of the Navy
 Research and development centers
 Space and Naval Warfare Systems Command



MR. GARY MORTON
DIRECTOR OF NAVY LABORATORIES, JANUARY 1984 TO FEBRUARY 1986

Subjects:

AEGIS program
Antisubmarine warfare (ASW)
Busey, ADM James
Clark, VADM Glenwood
Colvard, Dr. James
Combat system engineering
Command control, and communication
Disestablishment of NAVMAT
Doak, Robert
Establishment of SPAWAR
Fleet ballistic missiles
"Haul Down" report

"Ill Wind" operation
Lehman, John
Meyer, RADM Wayne
Research and development
Senior Executive Service
SSN 21 submarine X program
Technical Development Plan
Warfare systems architecture and
engineering
Weaver, RADM John
Williams, ADM John

MORTON, RADM THOMAS

Interviewer: Unknown

Date of Interview: October 9, 1975 and February 9, 1976

Documentation: 484 page transcript, index

Abstract: RADM Morton served as a gunnery officer on the *USS NORTH CAROLINA* during World War II, and was the Commanding Officer of the Naval Weapons Laboratory at Dahlgren, Virginia from 1960-1961.

Repositories: NHC, NWCM, USNA, USNI

Individuals Mentioned:

McNamara, Robert S.

Institutions:

Naval Surface Weapons Center
Naval Weapons Laboratory

Subjects:

Ballistic research laboratories
Ordnance
Ordnance laboratories

MYERS, RALPH

Interviewer: Dr. Mark Jacobsen

Date of Interview: May 22, 1986

Documentation: 1 tape, 20 page transcript

Abstract: Ralph Myers describes his career and his involvement with the NEMO, Sealab, SUBROC, and ASROC programs. In particular, he discusses SUBROC and ASROC testing off San Clemente Island and the SEALAB accident in which one of the SEALAB divers died. He also discusses working with the Navy Acquisition and contracting process, particularly how these changed during his career.

Repositories: NOSC

Individuals Mentioned:

Cannon, Barry
Clark, Willard
Flahive, Al
Kunz, Brad
Larve, Ben
Olsen, Del

Pace, Bob
Rainbolt, Winslow
Talkington, Howard R.
Tompkins, CDR
Vetter, Joe

Institutions:

NDTS

Subjects:

Acquisition
Antiship rocket
Antisubmarine rocket (ASROC)

Contracting
SEALAB

Other Entries:

Polaris
Sandia warhead
USS ELK RIVER

NEWELL, DR. HOMER E.

Interviewer: Dr. Richard F. Hirsh

Date of Interview: July 18, 1980

Documentation: Tapes, transcript

Abstract: Dr. Newell discusses war work and the rocket-sonde program at NRL, the atomic bomb, upper atmospheric research, establishment of the V-2 Panel, Edward Hulburt and Herbert Friedman, the Vanguard Satellite Program, IGY, reaction to the launch of Sputnik, creation of NASA in 1958, his career with NASA, the effects of Vietnam on the space program, and the Space Telescope and Space Shuttle.

Repositories: AIP

Individuals Mentioned:

Friedman, Dr. Herbert
Hulburt, Dr. Edward O.

Institutions:

International Geophysical Year
National Aeronautics and Space Administration
Naval Research Laboratory

Subjects:

Astronomy
Friedman, Dr. Herbert
Hulbert, Dr. Edward O.
National Aeronautics and Space
Administration

Space astronomy
Space telescope

Other Entries:

Atmospheric research
Rocket-Sonde
Space shuttle
Sputnik

V-2 Rocket
Vanguard program
Vietnam War

NIEDERMAIR, JOHN CHARLES

Interviewer: Unknown

Date of Interview: June 1975, April 1976

Documentation: 349 page transcript, index

Abstract: Mr. Niedermair discusses his role in the salvage of the S-4 and S-51 submarines during the 1920's, his many years in the Bureau of Ships, and his design of the tank landing ship (LST). He mentions RADM David W. Taylor's work at the Experimental Model Basin, Taylor's book "The Speed and Power of Ships," and CAPT Harold Saunders' contributions to naval architecture and the science of hydrodynamics.

Repositories: NHC, NWCM, USNA, USNI

Individuals Mentioned:

Saunders, CAPT Harold E.
Taylor, RADM David W.

Institutions:

Bureau of Ships
David Taylor Model Basin
Experimental Model Basin

Subjects:

Hydrodynamics
Naval architecture
Salvaging of submarines
Saunders CAPT Harold E.

Ship design
Submarines
Tank Landing Ships
Taylor, RADM David W.

Other Entries:

S-4 Submarine
S-51 Submarine

NIEMANN, RALPH A.

Interviewer: Cynthia Rouse

Date of Interview: October 26, 1978

Documentation: 15 page transcript

Abstract: This interview is Chapter X of Dahlgren, edited by Kenneth G. McCollum. Mr. Niemann discusses the first IBM card-feed computers at Dahlgren, the Aiken Relay Computer, computer-generated ballistics tables, the 60 desk calculators used by WAVES in World War II, the NORC, and advances in speed of computers; use of the NORC in NRL's Vanguard Program, the IBM STRETCH computer, the effect of the Fleet Ballistic Missile Program on computer work at Dahlgren, constructing a facility to house the computers, and management problems.

Repositories: NSWC

Individuals Mentioned:

Bramble, Dr. Charles C.

Burke, William

Cohen, Dr. Charles J.

Gleissner, Gene H.

Ryland, Robert

Walker, John

Institutions:

International Business Machine Company

Naval Proving Ground

Naval Research Laboratory

Naval Weapons Laboratory

Subjects:

Computers

Fire control computers

Other Entries:

Fleet Ballistic Missile Program

Naval Ordnance Research Calculator

Polaris program

anguard program

NUTT, HAROLD V.

Interviewer: Dr. David K. Allison

Date of Interview: October 22 and November 4, 1982

Documentation: 7 tapes, 125 page transcript

Abstract: Mr. Nutt tells about his background and education, his work in private industry developing greases and lubricating oils, and his interest in aeronautical engineering. He accepted a job at the Engineering Experiment Station (EES) in 1938, and speaks of the change during the war years from testing material manufactured by industry to research, testing captured equipment, the post-war reduction in force, and becoming superintendent of the Internal Combustion Laboratory. He also discusses the relationship between EES and BUSHIPS, the Metallurgical Laboratory, experimental submarine engines, early work with titanium, and how the loss of the THRESHER stimulated the development of SDRVs. He speaks of his involvement in VLAP, the reorganization during the 1960s, and the change in name to Marine Engineering Laboratory, and the consolidation of MEL and NSRDC.

Repositories: DTRC

Individuals Mentioned:

Argora, Larry
Joakim, W. F.
King, FADM Ernest
Smith, Clane

Smith, Watt
Taylor, RADM David W.
Vincent, CAPT Manuel da Costa
Zumwalt, ADM Elmo

Institutions:

Bureau of Ships
David Taylor Naval Ship Research and
Development Center

Engineering Experiment Station
Marine Engineering Laboratory
Office of Naval Research

Subjects:

Bearings
Bureau of Ships
Lubrication

Metallurgy
Submarine propulsion systems

Other Entries:

Hydrogen peroxide engines
Ship storage
Submarine Deep Rescue Vehicles

Technical directors
USS THRESHER
Vietnam Laboratory Assistance Program

O'NEILL, WILLIAM

Interviewer: Dr. David K. Allison

Date of Interview: December 14, 1981

Documentation: 1 tape

Abstract: This interview centers on the history of hydrofoil development in the Navy. Mr. O'Neill mentions the original mission studies and testing by NELC of the ships *PLAINVIEW* and *HIGH POINT*, and the propulsion system and design of the hydrofoil gunboats *TUCUMCARI* and *FLAGSTAFF*. He discusses early work by ONR and MIT, the program at DTNSRDC, how it was funded, and key players at the Center.

Repositories: DTRC

Individuals Mentioned:

Buckley, William H.
Ellsworth, William
Johnson, Dr. Robert S.

Kelly, Jim
Schab, Henry

Institutions:

Boeing Airplane Company
David Taylor Model Basin
David Taylor Naval Ship Research and
Development Center

Naval Electronics Laboratory Center
Naval Ship Research and Development
Center
Office of Naval Research

Subjects:

Cavitation
Hydrodynamics

Hydroelasticity
Hydrofoils

Other Entries:

Hydrodynamic Research
USS FLAGSTAFF
USS HIGH POINT

USS PLAINVIEW
USS TUCUMCARI

OWEN, RADM THOMAS B.

Interviewer: Unknown

Date of Interview: 1974

Documentation: 3 tapes

Repositories: DTRC

PAGE, DR. ROBERT

Interviewer: Dr. David K. Allison

Date of Interview: October 26, 27, 1978

Documentation: 9 tapes, 217 page transcript

Abstract: Dr. Page discusses his background and education, taking the Civil Service Examination and being offered a job at NRL, work on frequency measurement and the invention of the frequency meter, work on radar from 1930-1934, assignment to radio detection in 1934, pulse radar, the Signal Corps radar project, microwave radar, invention of the radar duplexer, test of equipment on the LEARY, NEW YORK, and TEXAS, the Tizard Mission, airborne radar, British radar development, and opposition to the NDRC Radiation Laboratory. He also talks about the publication of the Ridenour Report, fire control radar, monopulse radar, the effect of ONR on research money, over-the-horizon radar, administrative problems at NRL, patents to NRL employees, his feelings about being Director of Research, reflections on the relationships between civilian scientists and naval officers, Vanguard Project, the Long Range Modernization Program, and his role in bringing ocean sciences to NRL.

Repositories: NRL

Individuals Mentioned:

Adams, Charles F.
Bowen, VADM Harold G.
Crosley, Al
Davis, Tommy
Friedman, Dr. Herbert
Gebhard, Dr. Louis A.

Guthrie, Dr. Robert C.
Hulburt, Dr. Edward O.
Philpott, LaVerne
Taylor, Dr. A. Hoyt
Young, Dr. Leo C.

Institutions:

Bureau of Engineering
Bureau of Ships
National Defense Research Committee

Naval Research Laboratory
Radio Corporation of America (RCA)
U.S. Army Signal Corps



DR. ROBERT MORRIS PAGE
WITH AN EARLY RADAR ANTENNA

Subjects:

Airborne radar
Fire control radar
Microwave radar
Naval Research Laboratory

Military-civilian relationships
Office of Naval Research
Radar
Radio detection

Other Entries:

Radar research
Ridenour Report
Tizard Mission

USS LEARY
USS NEW YORK
USS TEXAS

PARKER, RADM JACKSON

Interviewer: Paul Stillwell

Date of Interview: November 8, 1985; January 16, 17, February 21, and September 22, 1986

Documentation: 500 page transcript

Abstract: A birth-to-present day oral memoir, concentrating on the admiral's 45-year naval career.

Repositories: USNI, USNA, NHC, NWC

Institutions:

Babcock & Wilcox
Bath Iron Works

Other Entries:

Development of the 1200-psi propulsion plan
Forrest Sherman class destroyers
USS CHARLES F. ADAMS (DDG-2)

PARSONS, HARRY R.

Interviewer: Albert B. Christman

Date of Interview: February 1967

Documentation: 29 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Harry Parsons describes his relationship with his brother, his father's influence on the family, and the family's move West from Chicago to Fort Sumner, NM. He recalls his father's career, the social life of Fort Sumner, and RADM Parsons around the time of his death.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Parsons, Clarissa
Parsons, Critchell
Parsons, RADM William S.

Subjects:

Parsons, RADM William S.

PATTON, HAROLD

Interviewer: Elizabeth Babcock

Date of Interview: September 4, 1989

Documentation: 95 page transcript, index

Abstract: Mr. Patton recounts his experiences as an early employee (1948 to 1955) of NOTS, particularly his work on numerous rockets during the heyday of NOTS rocket developments and his management career at NOTS, which culminated in year as head of the Rocket Development Department. He describes his vivid memories of a 1952 trip to Korea, where he improvised graph paper and even turned himself into a human centrifuge in order to come up with interim solutions to technical problems encountered in tactical use of the 2.75-inch folding-fin aircraft rocket and its associated equipment. Other problems he encountered (and proposed solutions for) on this trip involved the NOTS-developed Ram and high-velocity aircraft rocket (HVAR). Patton also describes problems and technical innovations of the 2-inch Gimlet. He notes that the prevailing management philosophy, which carried over into the Sidewinder development, was to keep development as simple and as inexpensive as possible, and he comments on the period of transition from rockets to guided missiles at NOTS. He also recalls the active social life of China Lake during that era.

Repositories: NWC

Individuals Mentioned:

Connolly, VADM Thomas F.
Ellis, Dr. Emory L.
Makepeace, Gerry
Marcus, Stan
McLean, Dr. William B.

Moorer, ADM Thomas H.
Sage, Dr. Bruce
Smith, VADM Levering
Vieweg, RADM Walter V. R.

Institutions:

Bureau of Ordnance
Naval Ocean Systems Center

Naval Ordnance Test Station
Naval Weapons Center

Other Entries:

China Lake community
Gimlet (2 inch rocket)
High-velocity aircraft rocket
Mighty Mouse (2.75-inch folding-fin
aircraft rocket)

Project Lamb (2-inch rocket)
Rolling Airframe Missile (RAM)
Rocket launchers
Spinners

PEET, VADM RAYMOND E.

Interviewer: CDR Etta-Belle Kitchen

Date of Interview: May 11, 12, 21, 22, 23, 25, and July 14, 1978

Documentation: 548 page transcript

Abstract: A birth-to-present day oral memoir, concentrating on the admiral's 32-year naval career.

Repositories: USNI, USNA, NHC, NWC

Individuals Mentioned:

Curtis, RADM Maurice E.
Entwistle, RADM Frederick I.
Gallery, RADM Daniel V.
Goodfellow, LCDR Alexander S.

Hyland, CDR John J.
Monroe, CAPT Jack P.
Pickett, CDR Ben B.
Waters, CDR Odale D., Jr.

Institutions:

Bell Laboratories
M.I.T.

Other Entries:

Firing error indicator
Operational Development Force
Ship habitability

Sodium-potassium nuclear propulsion plan
Target acquisition
White phosphorus shells

PEHRSON, GORDON

Interviewer: Unknown

Date of Interview: February 1974

Documentation: 66 page transcript

Abstract: Mr. Pehrson headed the Plans and Program Division of the Special Projects Office for Polaris. He developed program management concepts, and the Program Evaluation Review Technique (PERT). This is one of a series of seven interviews on the concept and development of the Polaris program conducted by the U.S. Naval Institute Oral History Program.

Repositories: NWCM, USNA, USNI

Subjects:

Ballistic missile submarines
Fleet Ballistic Missiles
Nuclear missiles
Nuclear powered fleet ballistic
missile submarines

Submarine launched ballistic missiles
Weapons Systems

Other Entries:

Polaris program
Program evaluation review technique

PETERKIN, ERNEST W.

Interviewer: Dr. David K. Allison

Date of Interview: July 20, 1981

Documentation: 1 tape

Abstract: Mr. Peterkin discusses the SOLRAD (solar radiation) satellite program. The interview is supplemented by a collection of papers on research management.

Repositories: NRL

Institutions:
Naval Research Laboratory

Other Entries:
Solar Radiation (SOLRAD) Program

PETERSEN, VADM FORREST SILAS

Interviewer: Dr. William J. Armstrong

Date of Interview: April 7, 1980

Documentation: 1 tape

Repositories: NAVAIR

Institutions:
Naval Air Systems Command

PITTENGER, RADM RICHARD

Interviewer: Dr. Joseph Marchese

Date of Interview: February 28, 1990

Documentation: 2 tapes, 21 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Pittenger initially provides information on early ASW efforts and the disestablishment of NAVMAT and its ASW Systems Program Office, PM-4. RADM Pittenger also mentions the continuing need for an organization like PM-4. He then discusses the development of PD 80, formerly SPAWAR's ASW Program Directorate, and OP-71, the Office of the Chief of Naval Operations' Director of ASW Division. He elaborates on SPAWAR's interactions with other systems commands and the organizational development of PD 80. He also describes problems with oversight and accomplishments in sea testing. Finally, he discusses the ambiguities of SPAWAR's mission and the relationship between SPAWAR 30--the WSA&E Directorate--and PD 80.

Repositories: DTRC

Individuals Mentioned:

Beach, Dr. Eugene H.
Dorman, RADM Craig
Hogg, ADM James
Jackson, RADM Dempster
Josephson, ADM Joseph
Lehman, John

Leuschner, RADM Robert
Rowden, VADM William
Watkins, ADM James
Witter, RADM Raymond
Wolkensdorfer, RADM Daniel

Institutions:

Bureau of Naval Weapons
Center for Naval Analyses
Defense Science Board
Department of Defense
Epic Engineering Corporation
Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Naval Ship Systems Command
Office of the Chief of Naval Operations
Presearch, Inc.
Space and Naval Warfare Systems Command
Toshiba, Inc.

Subjects:

Antisubmarine warfare (ASW)
Aspin report
ASW assessment team
CNO Urgent ASW R&D Program
Defense Science Board
Disestablishment of NAVMAT
Establishment of SPAWAR

Project Caesar
Sound surveillance system
Surveillance towed array sensor system
(SURTASS)
Top-level warfare requirements
Walker-Whitworth spy case

PLAIN, DR. GILBERT

Interviewer: Elizabeth Babcock

Date of Interview: December 9, 1975

Documentation: 30 page transcript, index

Abstract: Dr. Plain comments on his move from MIT to NOTS and on Dr. Brode, Dr. Sage, and Dr. Warner. He talks about Aircraft Sights work, the start of the Sidewinder Missile Project, and his position as Head of Properties of Matter. Plain describes the NOTS/NWC commanders since 1949 and the various aspects of base operation, including the effect of the Freedom of Information Act, morale problems at NOTS, and Equal Employment Opportunity.

Repositories: NWC, DTRC

Individuals Mentioned:

Brode, Dr. Wallace
Hunter, Dr. Hugh
LaBerge, Dr. Walter B.
McLean, Dr. William B.

Sage, Dr. Bruce
Warner, Dr. Arthur H.
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Brode, Dr. Wallace
Naval Ordnance Test Station
Sage, Dr. Bruce

Sidewinder Missile Project
Warner, Dr. Arthur H.

POLACHEK, HARRY

Interviewer: Carole E. Nowicke

Date of Interview: December 16, 1985

Documentation: 1 tape, 25 page transcript

Abstract: Polachek relates his coming to DTMB to his early mathematics and computing work at NOL, and the uncertainty over his getting the NORC at NOL while DTMB was receiving a UNIVAC; finding applications for a high speed computer; basic research work; women in the department; computer-aided design; work for BUSHIPS and the federal government; and leaving DTMB for the Atomic Energy Commission (AEC).

Repositories: DTRC

Individuals Mentioned:

Cuthill, Dr. Elizabeth
Hopper, COMO Grace
Keil, Dr. Alfred H.

Mumma, RADM Albert G.
Rickover, ADM Hyman
Wright, RADM Edward Alvey

Institutions:

David Taylor Model Basin
MIT
Naval Ordnance Laboratory

Naval Research Laboratory
Naval Weapons Laboratory

Subjects:

Computers

Other Entries:

BINAC
EDVAC

Electronic Numerical Integrator and
Computer (ENIAC)
UNIVAC

POLIN, JERRY

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 13, 1982

Documentation: 1 tape, index

Abstract: Mr. Polin talks about human factors engineering, his personal background, and his work for Martin Marietta. He comments on his work for the state of Pennsylvania doing statistical highway modeling, his time at Philco-Ford, and his arrival at the Philadelphia Navy Yard as a GS-7 management analyst. Polin discusses the Defense Logistics Agency, the Centrifuge

Department at AMRD, and NADC's outside appearance. He describes what it meant to win an NADC fellowship for graduate work at Temple University and his project assignments in human engineering at NADC.

Repositories: NADC, DTRC

Individuals Mentioned:

Lazo, John
Polis, Dr. David

Institutions:

Defense Logistics Agency
Martin Marietta
Naval Air Development Center

Philadelphia Navy Yard
Philco-Ford Corporation
Temple University

Subjects:

Antisubmarine aircraft
Antisubmarine warfare (ASW)

Defense Logistics Agency
Sonobuoys

Other Entries:

F-14 project
Human centrifuge
Human factors engineering

Light airborne ASW vehicle
Light airborne multipurpose system

POLIN, JERRY

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 15, 1982

Documentation: 1 tape, index

Abstract: Mr. Polin discusses the Navy Scientist Training Exchange Program, (NSTEP) which was set up as a NAVMAT function under the DNL in 1978, and relations between NADC and NAVMAT. He describes his assignment at NAVMAT in the laboratories management area and his work with the SHORESTAMPS manpower needs assessment program.

Repositories: NADC, DTRD

Individuals Mentioned:

Law, Howard

Institutions:

Naval Air Development Center
Naval Material Command

Other Entries:

Laboratory management
Naval Air Development Center

Naval Material Command
Navy Scientist Training Exchange Program

POLLAK, GEORGE

Interviewer: J. D. Gerrard-Gough

Date of Interview: October 24, 1975

Documentation: 8 page transcript, index

Abstract: Pollak describes his first, short tenure at NOTS, his two years in the Army, and his return to NOTS-Pasadena Annex as a management analyst. He recalls becoming Deputy of Administration at NOTS and the Navy reorganization of 1967. Pollak comments on relations between NOTS-China Lake and Pasadena, the duties of the officer-in-charge, and Douglas Wilcox's role as Deputy for Administration.

Repositories: NWC, DTRC

Individuals Mentioned:

Wilcox, Douglas J.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center
Pasadena Annex

Subjects:

Naval Ordnance Test Station
Wilcox, Douglas J.

POLLARD, DR. JAMES R.

Interviewer: Dr. Joseph Marchese

Date of Interview: May 29, 1990

Documentation: 2 tapes, 29 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Dr. Pollard initially gives information regarding his professional background as well as insight into his assignment to SPAWAR. He discusses his work on BFIM and the results of that work before the CNO Executive Board. He continues with input regarding Dr. Thomas Clare's role in BFIM and BFIM's perceived use. Dr. Pollard elaborates on SPAWAR's relationship with OPNAV. He then mentions the funding problems SPAWAR encountered in trying to carry out its WSA&E function. Of interest also is his discussion surrounding the early days of WSA&E in SPAWAR and the organizational problems with which SPAWAR had to deal. Dr. Pollard details the influence OPNAV's Director of Naval Warfare, OP-095, had on the organizational structure of WSA&E and VADM Glenwood Clark's attitude toward the initial architecture schema. Dr. Pollard provides information on the reactions of other systems commands to WSA&E and compares the organizational stability of SPAWAR's divisions of warfare systems engineering and warfare systems architecture. He concludes by discussing Melvyn Paisley's view on WSA&E and the effect the lack of funding authority has had on the overall program.

Repositories: DTRC

Individuals Mentioned:

Batzler, RADM Jack
Carlson, RADM William
Clare, Dr. Thomas
Clark, VADM Glenwood
Doak, Robert
Dorman, RADM Craig
Hogg, ADM James
Langston, CDR Marvin

Lehman, John
McBurnett, Genie
Meyer, RADM Wayne
Miller, VADM Richard
Mills, James
Paisley, Melvyn
Topping, RADM Robert

Institutions:

CNO Executive Board
Naval Air Systems Command
Naval Coastal Systems Center
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Center

Naval Sea Systems Command
Naval Surface Warfare Center
Office of the Chief of Naval Operations
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command
Special Projects Office

Subjects:

AEGIS program
Antiair warfare
Antisubmarine warfare (ASW)
Battleforce information management
Clare, Dr. Thomas
Clark, VADM Glenwood
Command control, communication, and
intelligence
Disestablishment of NAVMAT
Establishment of SPAWAR

Force level multi-warfare analysis
Paisley, Melvyn
Research and development centers
Strategic planning
Top-level warfare requirements
Warfare systems architect
Warfare systems architecture and
engineering
Warfare systems engineering

POLLOCK, CAPT THOMAS

Interviewer: Albert B. Christman

Date of Interview: May 1967

Documentation: 41 page transcript, index

Abstract: CAPT Pollock explains his background in rocket research and the initial work by the Navy and CalTech on forward firing rockets. He discusses rocket testing procedures, the uses of rockets in combat in the Atlantic and the Pacific during World War II, and the results of test conducted at Inyokern and Goldstone Lake. He comments on his crew, the naming of NOTS, and the risks involved in rocket research.

Repositories: NWC, DTRC

Individuals Mentioned:

Anderson, Dr. Carl
Burroughs, RADM Sherman E.

Lauritsen, Dr. Charles C.
Renard, RADM Jack C.

Institutions:

Bureau of Ordnance
California Institute of Technology
Naval Ordnance Test Station

Subjects:

Rocket research

POLLOCK, CAPT THOMAS

Interviewer: Albert B. Christman

Date of Interview: July 30, 1973

Documentation: 3 tapes, 53 page transcript

Abstract: This is a taped review of the first six chapters of The Grand Experiment at Inyokern, Naval History Division, Government Printing Office, Washington, DC., 1978, by Albert B. Christman, and J. D. Gerrard-Gough.

Repositories: NWC, DTRC

POWERS, KENNETH

Interviewer: Elizabeth Babcock

Date of Interview: May 18, 1981

Documentation: 34 page transcript, index

Abstract: Mr. Powers comments on his first assignments at NOTS, problems with contractors for the Sidewinder Missile, and relations with BUWEPS and BUSHIPS. He talks about the development of Sidewinder, differences between NOTS and NWC, and his time in Europe working on NATO Sidewinder. Powers describes NOTS/NWC's relationship with Navy people in Washington, the motivations of military decision makers and industry, and the reasons for the success of the Sidewinder Program. He also makes suggestions on improving management of Sidewinder.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Cartwright, Dr. W. Frank
Knemeyer, Franklin H.
LaBerge, Dr. Walter B.

Smith, Charles P.
Wilcox, Dr. Howard A.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Bureau of Ships
Bureau of Weapons Contracting

Naval Ordnance Test Station
Sidewinder Missile Project

PRICE, D. GEORGE

Interviewer: Roger Kempler

Date of Interview: July 28, 1982

Documentation: 37 page transcript, index

Abstract: Mr. Price discusses his early background in the Navy Personnel Research Program, World War II and Personnel Research, and postwar establishment of the Personnel Research Division. He describes major figures in NPRDC, his personal philosophy, and the need for NPRDC. Price discusses funding, personnel research activities in San Diego and Washington, and relations between NPRDC and ONR. He also comments on the move toward "centers of excellence" and ADM Elmo Zumwalt.

Repositories: DTRC, NPRDC

Individuals Mentioned:

Daley, Dr. John
Herron, RADM Edwin W.
McDowell, Perceval E. (Pete)

Van Swearingen, CAPT Earl K.
Zumwalt, ADM Elmo

Institutions:

Chief of Naval Material
Navy Personnel Research and Development Center
Office of Naval Research

Other Entries:

"Centers of Excellence"
Office of Naval Research

Personnel Research
Zumwalt, ADM Elmo

PRIDE, ADM ALFRED M.

Interviewer: Peter Spectre and Paul Stillwell

Date of Interview: January 24, February 7, April 18, 1970 and January 12, 1984

Documentation: 235 page transcript

Abstract: A birth-to-present day oral memoir, concentrating on the admiral's 42-year naval career.

Repositories: USNI, USNA, NHC, NWC

Individuals Mentioned:

Browning, LCDR Miles R.
Chevalier, LCDR Godfrey deC
Ely, Eugene
Fahrney, RADM Delmer S.

Griffin, LCDR Virgil C., Jr.
Norden, Carl L.
Stevens, LCDR Leslie C.

Subjects:

Aeronautical development

Other Entries:

Air-cooled engines
Arrested landing gear
Autogiro
Deck lighting system
Drones

Test pilots
USS LANGLEY (CV-1)
USS LEXINGTON (CV-2)
USS SARATOGA (CV-3)

PROBUS, DR. JAMES H.

Interviewer: Dr. David K. Allison

Date of Interview: July 27, 1983

Documentation: 3 tapes, 47 page transcript

Abstract: Dr. Probus discusses how he became DNL and his impressions of the laboratories on assuming the position, LUS and resulting RIFs, the evolution of the center concept, problems with program oriented funding, implementing the systems approach, the role of COs and TDs in program management, career development for laboratory personnel, the influence of Dr. William McLean, Dr. Chalmers Sherwin, and Robert Morse on the office of the DNL, selection of COs and TDs, the role of the laboratories in the DSARC-DNSARC process, ATOWG, NSAP and the Corporate Plan, the value of the DNL's military deputy, laboratory inspections, and laboratories and the assessment of fleet readiness.

Repositories: DTRC

Individuals Mentioned:

Berman, Dr. Alan
Galantin, ADM Ignatius
Hillyer, Robert
Johnson, Dr. Gerald
Keach, CAPT Donald

Lawson, Dr. Joel
Michaelis, ADM Frederick
Morse, Dr. Robert W.
Parrish, CAPT David
Whittle, ADM Alfred J., Jr.

Institutions:

Defense Systems Acquisition Review
Committee
Department of the Navy Systems
Acquisition Review Committee

Director of Navy Laboratories
Systems Commands

Other Entries:

Advanced Technical Objectives Working
Groups
Commanding Officers
Corporate plan
Director of Navy Laboratories
Laboratory Utilization Study
McLean, Dr. William B.

Morse, Dr. Robert W.
Navy Industrial Fund
Navy Science Assistance Program
Program Management
Reduction-in-force
Sherwin, Dr. Chalmers
Technical directors

PROBUS, DR. JAMES H.

Interviewer: David K. Allison

Date of Interview: June 20, 1985

Documentation: Tape, 15 page transcript

Abstract: Dr. Probus discusses the disestablishment of NAVMAT, the motivations behind it, and the effects on the Navy laboratories.

Repositories: DTRC

Individuals Mentioned:

Lehman, John
Paisley, Melvyn
Rickover, ADM Hyman

Institutions:

Naval Material Command
Naval Sea Systems Command
Space and Naval Warfare Systems Command

Subjects:

Disestablishment of NAVMAT
Laboratory organization

Other Entries:

Weapons system acquisition management

PROBUS, DR. JAMES H.

Interviewer: Dr. Joseph Marchese

Date of Interview: July 24, 1989

Documentation: 3 tapes, transcript

Abstract: This interview is one of a series originally conducted to gather material for a history of the development of the MK 48 Torpedo. Dr. Probus is a former Director of Navy Laboratories, and describes his background and previous assignments. The central issue addressed throughout this interview is how different roles and missions are assigned to the individual laboratories in the Navy laboratory community, with special emphasis on the assignment of torpedo work to NSWC, NOSC, and NUSC. Probus talks about the

reorganization of the laboratories in the early 1970s, the relations between industry, the Systems Commands, and the Navy's laboratories, the need for some duplication of effort in the R&D community, the future of the lightweight/heavyweight torpedo division current in the Navy, and whether the wave of the future may be a "medium weight" torpedo. The second part of this interview is devoted to various issues concerning engineering development in the Navy laboratories. Dr. Probus discusses the mix of work accomplished at the labs, technology base, engineering development and contract supervision, the quality of personnel and facilities at the labs for carrying out research, the responsiveness of the labs, and several hypotheses as to why the labs are not perceived as doing much real development work anymore.

Repositories: DTRC

Institutions:

Applied Research Laboratory/Pennsylvania State University	Naval Ocean Systems Center
Assistant Secretary of the Navy (RDT&E)	Naval Surface Weapons Center
Director of Navy Laboratories	Naval Underwater Systems Center
Harvard Underwater Sound Laboratory	Navy R&D Centers
Keyport Torpedo Station	Systems Commands
National Academy of Sciences	University of Washington/Applied Physics Laboratory

Subjects:

Commercial activities	Program management
Computer systems	Recruiting for Navy R&D Centers
Engineering development	Role of university laboratories
Five year plan	Technology base work
"Fixed-cost"/"cost-plus" contracting	Torpedo development
MK 48 torpedo	
Office of Management and Budget	
Circular A-109	

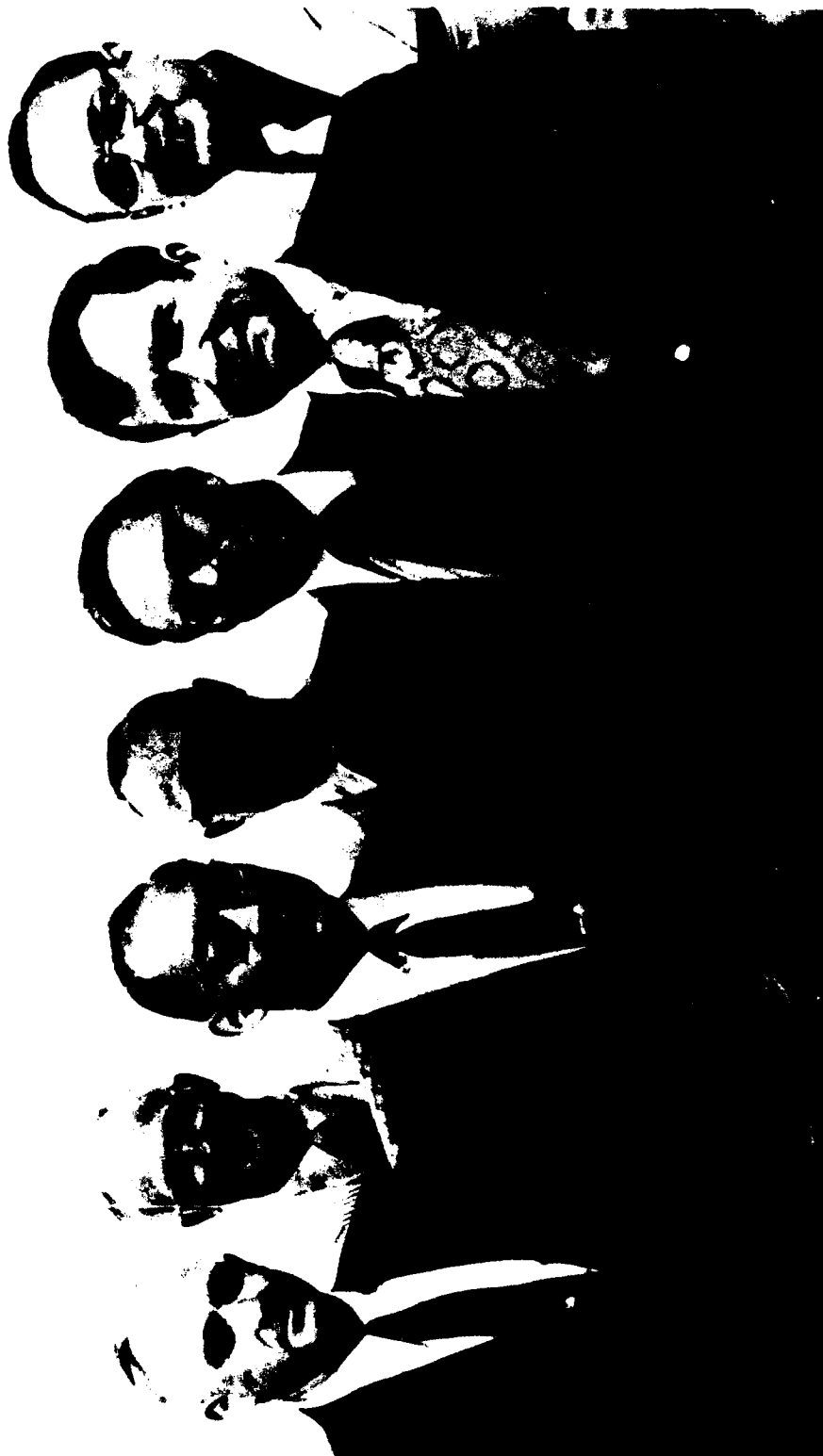
PRYOR, CAPT WILLIAM L.

Interviewer: Albert B. Christman

Date of Interview: April 1978

Documentation: Tape, 22 page transcript

Abstract: CAPT Pryor discusses the establishment of the New London, Connecticut, Laboratory, pre-World War II sonar testing, and conflicts between ADM Bowen and Dr. Vannevar Bush. He talks about the establishment of the San Diego research center, NOSC, the impact on R&D of Dr. Vern Knudson, and specifications for NOSC. Pryor describes how he came to New London, the shift of OSRD work to NRL, and his duty with the Pacific Fleet. He talks about problems at New London upon his return as CO, the need for accountability in R&D, and the failures of the previous CO. Pryor talks about the Navy officer in R&D, including dealing with civilians, officers with technical backgrounds, and the differences between officers of different bureaus. He discusses RADM William S. Parsons and the differences between laboratories.



DIRECTOR OF NAVY LABORATORIES AND STAFF, CIRCA 1976
LEFT TO RIGHT: CAPTAIN WILLIAMSON, BUD SHULL, THEODORE S. HUANG,
DR. JAMES PROBUS, DIRECTOR OF NAVY LABORATORIES; CAPTAIN DON WALSH,
ALLEN HIMES, AND HOWARD LAW

Repositories: DTRC

Individuals Mentioned:

Bowen, Dr. Ira S.
Bush, Dr. Vannevar

Knudson, Dr. Vern
Parsons, RADM William S.

Institutions:

Naval Ocean Systems Center
Naval Research Laboratory
Office of Scientific Research and Development

Subjects:

Accountability
Knudson, Dr. Vern
Naval Ocean Systems Center

Parsons, RADM William S.
Sonar

PRYOR, CAPT WILLIAM L.

Interviewer: Albert B. Christman

Date of Interview: June 26, 1981

Documentation: 2 tapes, 56 page transcript

Abstract: CAPT Pryor discusses his work in sonar, radio, and submarine research. He talks about his fleet duty, both in submarines and aboard the *USS WEST VIRGINIA*. Pryor describes his tenure at NRL and as Head of NUSL/New London.

Repositories: DTRC

Individuals Mentioned:

Rickover, ADM Hyman

Institutions:

Naval Research Laboratory
Naval Underwater Sound Laboratory

Subjects:

Radio
Sonar
Submarines

PURCELL, D.

Interviewer: David H. DeVorkin

Date of Interview: March 29, 1982

Documentation: Tapes, 85 page transcript

Repositories: NASM

Subjects:
Astronomy

PYATT, EVERETT

Interviewer: Dr. Joseph Marchese

Date of Interview: May 21, 1990

Documentation: 1 tape, 8 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Pyatt evaluates the effectiveness of NAVALEX and NAVMAT and discusses the purposes behind the establishment of SPAWAR. He provides insight into SPAWAR's role in WSA&E and the effectiveness of placing that mission in SPAWAR as opposed to placing it in other commands. Mr. Pyatt lends his opinion regarding the effectiveness of the R&D centers as well as the relationship between himself as Assistant Secretary of the Navy for Shipbuilding and Logistics and OCNR.

Repositories: DTRC

Individuals Mentioned:

Clark, VADM Glenwood
Fowler, VADM Earl
Hekman, VADM Peter

Rowden, VADM William
Wilkinson, VADM Joseph, Jr.

Institutions:

Naval Electronic Systems Command
Naval Material Command
Office of Naval Research
Office of the Chief of Naval Operations

Office of the Chief of Naval Research
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command
U.S. Air Force

Subjects:

Disestablishment of NAVMAT
Establishment of SPAWAR
Independent costing
Laboratory overhead

Research and development
Warfare systems architecture and
engineering

QUARLES, GILFORD G.

Interviewer: Nelson Wood

Date of Interview: April 24, 1978

Documentation: Tapes, transcript

Abstract: Mr. Quarles, a former director of the Ordnance Research Laboratory, speaks of his work there.

Repositories: NUM

Institutions:
Ordnance Research Laboratory
Pennsylvania State University

Subjects:
Acoustics research
Torpedoes

RABORN, RADM WILLIAM F.

Interviewer: Unknown

Date of Interview: September 1972

Documentation: 71 page transcript

Abstract: VADM Raborn served as the Director of the Special Projects Division to develop Polaris. This is one of a series of seven interviews on concept and development of the Polaris program conducted by the U.S. Naval Institute Oral History Program.

Repositories: NHC, NWCM, USNA, USNI

Subjects:

Ballistic missile submarines

Fleet Ballistic Missiles

Nuclear missiles

Nuclear powered fleet ballistic
missile submarines

Polaris program

Submarine launched ballistic missiles

Weapons systems

RAMAGE, VADM LAWSON P.

Interviewer: Dr. John T. Mason, Jr.

Date of Interview: August 9, 27, September 10, October 16, 31, December 6, 1973; and January 8, 22, February 12, March 26, April 30, and June 18, 1974

Documentation: 560 page transcript

Abstract: A birth-to-present day oral memoir, concentrating on the admiral's 39-year career.

Repositories: USNI, USNA, NHC

Individuals Mentioned:

Burke, ADM Arleigh A.

Gallery, RADM Daniel V.

Institutions:

Woods Hole Oceanographic Institution

Other Entries:
Inertial navigator
Jupiter missile system

RAMRAS, DR. EUGENE

Interviewer: Albert B. Christman

Date of Interview: March 9, 1978

Documentation: 1 tape, 16 page transcript

Abstract: Mr. Ramras discusses the evolution of NPRDC from several field activities. He describes how a particular project works, military interfaces with NPRDC, and the impact of computers on people. Ramras explains that the Navy's main problems of the 1970's are in personnel management and comments on laboratory consolidation, significant breakthroughs, and the future of the laboratory system.

Repositories: NHC, DTRC

Individuals Mentioned:

Frosch, Dr. Robert A.
Probus, Dr. James H.

Institutions:

Navy Personnel and Training Research Center
Navy Personnel Research and Development Center

Other Entries:

Laboratory consolidations
Personnel management
Personnel research

RAMSEY, DR. NORMAN

Interviewer: Unknown

Date of Interview: 1960

Documentation: 358 page transcript, index

Abstract: Dr. Ramsey talks about his education, research with Isidor Rabi and Enrico Fermi, the NDRC Radiation Laboratory, MIT, the development of radar, and the Manhattan Project. He speaks of work at Los Alamos, and discussions on use of the atomic bomb and possible targets, the Trinity test, and estimates of the damage at Hiroshima.

Repositories: COL

Individuals Mentioned:

Fermi, Enrico
Oppenheimer, Dr. Robert
Rabi, Isidor I.

Institutions:

National Defense Research Committee
Radiation Laboratory

Subjects:

Fermi, Enrico
Rabi, Isidor I.
Radar

Other Entries:

Manhattan Project
Trinity Test

RAMSEY, DR. NORMAN

Interviewer: Albert B. Christman

Date of Interview: May 3, 1966

Documentation: 34 page transcript, index

Abstract: This interview was conducted in order to gather material for a biography of RADM William S. Parsons. Dr. Ramsey discusses his first contact with RADM Parsons, and the early Los Alamos work on atomic weapons. Ramsey describes Parson's work, his interaction with his superiors, the quality of the bomb programs, and the problems encountered. The development and testing of the original prototypes is discussed at some length, together with the configuration of the bombs used in the Hiroshima and Nagasaki missions. Ramsey also comments on the strange military-civilian relationships that made the project work.

Repositories: DTRC

Institutions:

Air Force Scientific Advisory Board	Special Engineering Detachment
Johns Hopkins University/Applied Physics Laboratory	U.S. Army Air Corps
Naval Proving Ground	U.S. Army Ordnance

Subjects:

Atomic weapons	Ordnance research
Los Alamos	Parsons, RADM William S.
Military-civilian relationships	

RANEY, DR. WILLIAM

Interviewer: Dr. Vincent Ponko

Date of Interview: November 29, 1980

Documentation: 3 tapes, 47 page transcript, index

Abstract: Dr. Raney discusses the role of the National Research Council of the National Academy of Science in military R&D and his early years as Special Assistant to the ASN (R&D). This includes contacts with Dr. Chalmers Sherwin, lack of support for the Sherwin Plan, and the role of the DNL in dealing with the Sherwin Plan. Raney describes the beginnings of the DNL/DLP and its first heads, Dr. Gerald Johnson and Dr. Joel Lawson. He comments on exploratory development in Navy R&D, the systems approach to lab operations, and the role of management studies under SECDEF McNamara. Raney assesses Dr. Robert A. Frosch as ASN (R&D), his work in ONR, and talks about Thomas Amlie as Technical Director of NWC.

Repositories: DTRC

Individuals Mentioned:

Amlie, Dr. Thomas S.	Lawson, Dr. Joel
Foster, Dr. John S.	McNamara, Robert S.
Frosch, Dr. Robert A.	Sherwin, Dr. Chalmers
Johnson, Dr. Gerald	

Institutions:

National Academy of Science	Naval Weapons Center
National Science Foundation	Office of Naval Research

Subjects:

Amlie, Dr. Thomas	Johnson, Dr. Gerald
Director of Navy Laboratories	Lawson, Dr. Joel
Exploratory development	Sherwin Plan
Frosch, Dr. Robert A.	

RAY, IDA

Interviewer: Steven J. Dick

Date of Interview: August 21, 1987

Documentation: Tape, 54 page transcript

Abstract: Ms. Ray describes her years at the Naval Observatory, c. 1946 to 1973.

Repositories: USNO

Subjects:

Time service

REED, JERRY

Interviewer: Leroy L. Doig, III

Date of Interview: July 13, 1983

Documentation: Tapes, 23 page transcript, index

Abstract: After having left NWC for Headquarters positions, Mr. Reed gives his perceptions of NWC's role in the Navy and the changes in that role, Center relationships with Headquarters and the Fleet, military-civilian relationships at the Center, the changes in T&E requirements and planning over the years, and the advantages of competition. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:
DiPol, C. John

Institutions:
Naval Weapons Center

Other Entries:
Military-civilian relationships
Naval Weapons Center
Test and evaluation planning

REES, MINA

Interviewer: Unknown

Date of Interview: January 1984

Documentation: Eight tapes

Abstract: This interview is part of the "Women in the Federal Government Project," sponsored by the Arthur and Elizabeth Schlesinger Library on the History of Women in America and funded by the National Endowment for the Humanities. Ms. Rees describes her career with the Navy.

Repositories: RAD

Institutions:
Office of Naval Research

REGAN, DR. JAMES J.

Interviewer: Roger Kempler

Date of Interview: July 16 and November 17, 1982

Documentation: 48 page transcript

Abstract: Dr. Regan discusses becoming the first Technical Director of the NPRDC, coming into the organization as an outsider, his involvement in and coordination of all phases of the Center's activities, and the Center's role in coordinating all Navy personnel research and development. Regan also discusses the impact of the Navy Research Advisory Committee (NRAC) on personnel research, funding of NPRDC, relations with higher headquarters, the role of the Technical Director of NPRDC, the results of becoming part of NAVMAT, the impact of outside agency (IG, GAO) reviews of NPRDC, and the accomplishments and future challenges to the Center.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Bagley, VADM David
Collins, Dr. John
Frosch, Dr. Robert A.
Kinnear, RADM George E. R.

Probus, Dr. James H.
Ramras, Dr. Eugene
Rigney, Dr. Joseph
Silverman, Joseph

Institutions:

General Accounting Office
Naval Material Command
Naval Ocean Systems Center
Naval Personnel Research and Development
Center

Navy Industrial Fund
Navy Research Advisory Committee
Office of the Chief of Naval Operations
Systems Commands

Subjects:

Funding
Laboratory management
Manpower, Personnel and Training
Navy Research Advisory Committee
Personnel research

Research and Development Information
System
Resource management systems
Technical directors

REICH, VADM ELI T.

Interviewer: Booz, Allen and Hamilton

Date of Interview: February 10, 1975

Documentation: 1 tape

Abstract: VADM Reich discusses the organization of research and development within the Department of Defense and Department of the Navy. The interview focuses on the period immediately following the launch of Sputnik, and the reaction within the Navy community, specifically the creation of the OP-702 (Research and Development Budget Coordination and Management) organization, and the early days of RDT&E as a separate entity in the Navy. Reich talks about the origin of the three-part and then six-part division of Navy R&D funding, the implications of the missile testing he did aboard the *USS Canberra* in the early 1960s, and his selection afterwards to be Director of the Surface Missile Systems Project. Reich also reflects on what he calls the overemphasis on research in the Navy and on the ideal way to set up a systems acquisition activity.

Repositories: DTRC

Institutions:

Bell Laboratories
Chief Engineer, U.S. Navy
Defense Systems Acquisition Review
Council
Office of Naval Research

Office of the Chief of Naval Operations
Office of the Secretary of Defense
OP-702, Research and Development Budget
Coordination and Management
Surface Missile Systems Project

Subjects:

Engineering design
Franke Board
Funding
Laboratory organization

Organization of research and development
Polaris
Program management
Sputnik

REICH, VADM ELI T.

Interviewer: Unknown

Date of Interview: April 1978 and January 1979

Documentation: 520 page transcript, index

Abstract: VADM Reich discusses his submarine experience in World War II, command of the missile cruiser *USS CANBERRA*, and his role in the investigative study of the Tartar, Terrier and Talos missile programs.

Repositories: NHC, USNA, USNI, NWCM

Subjects:

Antiaircraft missiles
Surface-to-air missiles
Weapons systems

Other Entries:

Surface Missile Systems Project
Talos Missile

Tartar Missile
Terrier missile

REICH, VADM ELI T.

Interviewer: Unknown

Date of Interview: February 1979 and January 1980

Documentation: 681 page transcript, index

Abstract: Continues career in 1963, when VADM Reich was Director of the Surface Missile Systems Project. Prior to his retirement, he served as Deputy Assistant Secretary of Defense (Production, Engineering, and Acquisition).

Repositories: USNA, USNI, NWCM

Subjects:

Antiaircraft missiles
Surface-to-air missiles
Weapons Systems

Other Entries:

Surface Missile Systems Project
Talos Missile

Tartar Missile
Terrier missile

RENARD, RADM JACK C.

Interviewer: Albert B. Christman

Date of Interview: May 21, 1969

Documentation: 52 page transcript, index

Abstract: RADM Renard comments on his position as Magnetic Airborne Director at NOTS, test facilities at Goldstone Lake, and the search for a new rocket test sight. He talks about acquiring land for a new test facility, the turn of events that led to it, and CalTech's participation in the war effort under Dr. Charles Lauritsen. Renard describes RADM Mitscher's influence, the first rocket tests, and the opening of NOTS.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Fowler, Dr. William
Hayward, ADM John T.
King, FADM Ernest

Lauritsen, Dr. Charles C.
Mitscher, ADM Marc
Pollock, CAPT Thomas
Russell, ADM James S.

Institutions:

California Institute of Technology
Naval Ordnance Test Station
Ryan Aircraft

Subjects:

Lauritsen, Dr. Charles C.
Mitscher, ADM Marc

Naval research
Rocket research

RENNE, CLARENCE J.

Interviewer: Michelle Kilikauskas and Susan Priest

Date of Interview: December 19, 1980

Documentation: 30 page transcript, index

Abstract: Renne discusses his early career, relationships between blue and white collar employees at NOTS, and the employee services board there. He comments on the difficulty in firing poor employees, difficulty getting work done, and his management philosophy. Renne talks about who really got work done at NOTS/NWC, Dr. Haskell G. Wilson, and contracting work to outside companies. He also speaks on the importance of trusting government workers.

Repositories: NWC, NHC, DTRC

Individuals Mentioned:

Hays, Burrell W.
Printy, Rich
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station

Naval Weapons Center

Subjects:

Contracting

Military-civilian relationships

Naval Ordnance Test Station

Wilson, Dr. Haskell G.

REXROTH, JOHN**Interviewer:** Dr. Vincent Ponko**Date of Interview:** December 5, 1980**Documentation:** 3 tapes, 46 page transcript, index

Abstract: Mr. Rexroth discusses his work as a project officer in BUORD, including fire control, liaison officer with contractors, target designation work, and the Research and Development Board. He talks about support for applied research, in particular the work of Dr. Frank Tanczoz, the adverse influence of Polaris and other projects, and the establishment of ASN (R&D). Rexroth comments on BUWEPS, his tenure as TD there, his contact with the Applied Physics Labs, and relations with in-house labs. He also discusses the negative impact of releasing the labs from the Bureaus/SYSCOMs, the lack of benefit derived from CNM control of the labs, and project management in the Systems Commands. Rexroth states that labs should only handle technical management responsibility, private industry should remain part of the R&D picture, and evaluates Dr. Robert A. Frosch and Dr. William Raney as R&D leaders. He explains the impact SECDEF Robert S. McNamara had on R&D procedures, the role of the CNO in Naval R&D, and the problems the Navy faced in the mid-1970's.

Repositories: DTRC**Individuals Mentioned:**

Frosch, Dr. Robert A.

McNamara, Robert S.

Parham, CAPT John S.

Raney, Dr. William

Tanczoz, Dr. Frank I.

Wilson, Dr. Haskell G.

Institutions:

Applied Physics Laboratory

Bureau of Ordnance

Bureau of Weapons

Systems commands

Subjects:

Applied research

Bureau of Weapons

Fire control

Frosch, Dr. Robert A.

Laboratory management

McNamara, Robert S.

Polaris program

Raney, Dr. William

Tanczoz, Dr. Frank I.

RHYSBURGER, ROBERT

Interviewer: Steven J. Dick

Date of Interview: April 14, 1986 and August 1988

Documentation: Tapes

Abstract: Mr. Rhysburger describes his years at the Naval Observatory, especially in the 6-inch transit telescope division, 1952 to 1970.

Repositories: USNO

Subjects:

Astronomy

RICE, RADM JOSEPH

Interviewer: Dr. Joseph Marchese

Date of Interview: February 21, 1990

Documentation: 1 tape, 12 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Rice explains the reasons for the formation of NAVELEX, and the extent to which its actual operations conformed to its mission statement. Funding sources are addressed next. RADM Rice then comments on NAVELEX's interaction with NAVMAT, and its relationships with other systems commands. Finally, he mentions some of NAVELEX's significant achievements during his tenure.

Individuals Mentioned:

Galantin, ADM Ignatius

Rickover, ADM Hyman

Institutions:

Bureau of Ships

Naval Air Systems Command

Naval Electronic Systems Command

Naval Sea Systems Command

Naval Ship Systems Command

Subjects:

Funding

Naval Electronic Systems Command

Naval Tactical Data Systems

Research and development centers

Sound Surveillance System



ROBERT W. RHYNSBURGER
IN 1958 WITH THE AUTOMATED MEASURING ENGINE
FOR MEASURING RECORDS OF STAR POSITIONS

RICH, HARRY L.

Interviewer: Dr. David K. Allison

Date of Interview: May 14, 1984

Documentation: 3 tapes, index

Abstract: Mr. Rich reminisces about his thirty-three years at DTNSRDC, mentions his initial interview with Dr. Lyman Hewins and CAPT Alvey Wright, and his job as scientific assistant at the Experimental Model Basin. Rich was more interested in Structures and was able to transfer to that Department in 1941. He discusses the development of strain gauges, different types of hull strength testing, his memories of Operation Crossroads and how DTMB simulated the tests. He describes conditions at DTMB during World War II--the Marine guard force living in the Structural Mechanics Laboratory, and unusual tests with cadavers. He mentions the role of the Center in the full scale shock test of the THRESHER, involvement in testing the "3 T" missile systems, improvements in submarines and surface ships due to research in shock and vibration studies, his position as the Navy's Shock Coordinator, and his work as an NSAP advisor to the Korean Navy.

Repositories: DTRC

Individuals Mentioned:

Allen, Dr. Robert

Crook, Mary Charlotte

Hartmann, Dr. Gregory

Heller, CDR S. K.

Hewins, Dr. Lyman

Johnson, Everatt Emmil

Keil, Dr. Alfred H.

Kell, ADM Claude O.

Lawson, Dr. Joel

Saunders, CAPT Harold E.

Windenburg, Dr. Dwight F.

Institutions:

Applied Mechanics Laboratory

Bureau of Ordnance

Bureau of Ships

David Taylor Model Basin

David Taylor Naval Ship Research and
Development Center

Naval Ship Research and Development
Center

Navy Science Assistance Program
Shock and Vibration Centralization
Activity

Structural Mechanics Department
Structures Department

Subjects:

David Taylor Model Basin

Shock

Vibration programs

Other Entries:

Korean War

Manhattan Project

Navy Industrial Fund

Operation Crossroads

Operation Paperclip

Polaris

Shock hardening

Shock testing

Strain Gauges

Talos Missile

Tartar Missile

Terrier missile

USS BOSTON

USS DRAGONET

USS OMAHA

USS THRESHER

USS TROUT

RICHMOND, CDR JOHN

Interviewer: Albert B. Christman

Date of Interview: January 1967

Documentation: 125 page transcript, index

Abstract: CDR Richmond reminisces about the construction and expansion of NOTS during the two years he was in charge. He discusses the birth of the community at China Lake, CA. and the construction of permanent housing, schools, and recreational facilities. Richmond sketches the personalities of NOTS there during his time and describes the military function of the base.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Appleton, Robert
Blandy, ADM George
Byrnes, CAPT James
Duncan, CAPT James
Hayward, ADM John T.
Hussey, VADM George F.
Lauritsen, Dr. Charles C.

Sage, Dr. Bruce
Sandquist, CAPT Oscar
Switzer, VADM W. G.
Sykes, RADM James B.
Thompson, Dr. Louis T. E.
Zimmerman, LT

Institutions:

Naval Ordnance Test Station

Other Entries:

Manhattan Project
Naval Ordnance Test Station

RICKETTS, COMO MYRON V.

Interviewer: Dr. David K. Allison

Date of Interview: February 10, 1982

Documentation: 1 tape, 22 page transcript

Abstract: COMO Ricketts comments on the role of a military commanding officer in the Navy laboratories, his work at NRL, the establishment of the Fleet Support Office at DTNSRDC, NSAP, financial management at DTNSRDC, the relationship between the laboratories and Systems Commands, contracting out of commercial activities, and incentives to keep competent technical people in the laboratories.

Repositories: DTRC

Institutions:

David Taylor Naval Ship Research and
Development Center
Fleet Support Office

Naval Research Laboratory
Navy Science Assistance Program

Other Entries:

Commercial activities
Contracting
David Taylor Naval Ship Research and
Development Center
Navy Industrial Fund

RIGGS, LEROY

Interviewer: Leroy L. Doig, III

Date of Interview: June 18, 19, 1982

Documentation: Tapes, 113 page transcript, index

Abstract: Mr. Riggs discusses his career in the Navy and in Navy RDT&E; he reminisces on a number of individual programs, including folding fin aircraft rockets, Shrike, HARM, Battu (Bat II)/Corvus, Ram (6.5-inch ATAR), BOAR, Sidewinder, and NOTSNIK. This interview includes excellent material on Shrike development and contractor problems, the HARM program, the creation of NWC from NOTS and NOLC, the beginnings of the NOTS Project (NOTSNIK) satellite, the "Freeman Era" at China Lake and the reasons that RADM Freeman was sent to China Lake, and the numerous Commanders and Technical Directors that Riggs worked for. Mr. Riggs also discusses the unique character and legacy of the old Ballistics Divisions at NOTS, Center relationships with Headquarters (which he saw from both sides), the philosophy of nuclear weapons, the growth of electronic warfare work at NWC, the impact and contributions of NWC, in-house versus industry development, and the importance of the corporate memory.
ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Amilie, Dr. Thomas S.
Brown, Dr. Frederick W.
Cartwright, Dr. W. Frank
Corzine, Robert G.
Doig, Leroy L., Jr.
Etheridge, CAPT Melvin R.
Freeman, RADM Rowland G., III
Haff, CAPT William B.
Harris, RADM William L.
Haseltine, Dr. William R.
Hays, Burrell W.
Highberg, Dr. Ivar
Hillyer, Robert
Hollingsworth, Dr. Guilford L.
Hunter, Dr. Hugh

Jagiello, Leonard T.
Knemeyer, Franklin H.
LaBerge, Dr. Walter B.
McLean, Dr. William B.
Moran, VADM William
Porter, William B.
Potter, David
Rogers, Dr. Marguerite M.
Ruckner, CAPT "Count"
Russell, D. Jack
St-Amand, Dr. Pierre
Thompson, Dr. Louis T. E.
Ward, Dr. Newton E.
Wilcox, Dr. Howard A.
Wilson, Dr. Haskell G.

Institutions:

Naval Air Development Center
Naval Air Facility, China Lake

Naval Ordnance Laboratory (Corona)
Naval Weapons Center

Other Entries:

Aircraft rockets	Navy space program
Battu/Corvus Missile	Nuclear weapons
Bombardment Aircraft Rocket (BOAR)	Polaris
Defense suppression	R&D management
Electronic warfare	Rolling Airframe Missile (RAM)
High-Speed Antiradiation Missile (HARM)	Shrike
In-house, out-of-house mix of work	Standard Anti-Radiation Missile
Laboratory consolidations	Vietnam war, laboratory support
Naval Ordnance Test Station Satellite (NOTSNIK)	

RIVERO, ADM HORACIO**Interviewer:** Albert B. Christman**Date of Interview:** May 1967**Documentation:** 27 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. ADM Rivero discusses his relationship with Parsons at the Naval Proving Ground and the qualities which made Parsons an outstanding officer. He describes their work together on radar at NRL and at the Bikini Bomb Tests. Rivero talks about Parsons' personal influence, Parsons in the Bureau of Ordnance, and the need for Naval officers with a vision for the future.

Repositories: NWC, DTRC**Individuals Mentioned:**

Ashworth, VADM Frederick L.
Blandy, ADM George
Parsons, RADM William S.

Institutions:

Bureau of Ordnance
Naval Proving Ground
Naval Research Laboratory

Other Entries:

Bikini tests	Parsons, RADM William S.
Operation Crossroads	Radar research

ROACH, JAMES**Interviewer:** Unknown**Date of Interview:** February 3, 1975**Documentation:** 1 tape

Repositories: DTRC

ROBINSON, ADM SAMUEL M.

Interviewer: Unknown

Date of Interview: 1964

Documentation: 56 page transcript

Abstract: ADM Robinson recalls his career in Naval engineering, and discusses electric ship propulsion and the development of the high speed diesel engine, his service at the Puget Sound Navy Yard, and as Chief of the Bureaus of Engineering and Ships.

Repositories: COL, NHC

Institutions:

Bureau of Engineering

Bureau of Ships

Subjects:

Bureau of Engineering

Bureau of Ships

Diesel engines

Electric ship propulsion

Naval engineering

ROMAN, NANCY GRACE

Interviewer: Dr. Richard F. Hirsh

Date of Interview: June 30, 1976

Documentation: Tape

Repositories: AIP

Subjects:

Astronomy

ROMAN, NANCY GRACE

Interviewer: Dr. David DeVorkin

Date of Interview: August 19, 1980

Documentation: Tapes, 70 page transcript

Abstract: Ms. Roman speaks mainly about her career with NASA and the astronomy and space astronomy programs there. She also discusses her early life, education, and positions at the Yerkes Observatory and the Naval Research Laboratory.

Repositories: AIP

Institutions:

National Aeronautics and Space Administration
Naval Research Laboratory
Yerkes Observatory

Subjects:

Astronomy
Space astronomy

ROSEN, MILTON

Interviewer: Dr. David H. DeVorkin

Date of Interview: March 25, 1983

Documentation: Tapes, 90 page transcript

Abstract: This interview covers Mr. Rosen's education, employment at Westinghouse and the Federal Power Commission, and move to NRL in 1940. At NRL Rosen was involved in general atmospheric research, including the Rocket-Sonde Division, the V-2 rocket program, and his year at JPL. He describes the V-2 rocket and later programs, and discusses basic versus applied research at NRL.

Repositories: NASM

Individuals Mentioned:

Braun, Wernher von
Krause, Dr. Ernst H.

McLaughlin, R. B.
Tombaugh, Clyde

Institutions:

Federal Power Commission
Jet Propulsion Laboratory
Naval Research Laboratory

University of Pennsylvania
Westinghouse Corporation

Subjects:

Radar
Rocketry

Other Entries:

Aerobee Rocket
Applied research
Atmospheric research
Basic research
Convair Rocket

Missile research
Redstone Rocket
Rocket-Sonde
V-2 Rocket
Viking rocket

ROWDEN, VADM WILLIAM

Interviewer: Dr. Joseph Marchese

Date of Interview: February 23, 1990

Documentation: 1 tape, 21 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. VADM Rowden states that SPAWAR was established in order to handle more efficiently the traditional functions of NAVELEX, to provide an overarching system engineering technical operation, and to integrate space warfare operations with other warfare operations. He then discusses the reasons for placing WSA&E function under the direction of a three-star, and for the limited funding of WSA&E. A discourse regarding hardware transfers and the related difficulties in SPAWAR's dual tasks of WSA&E and a traditional systems command follows. VADM Rowden then discusses the placement of the Navy's R&D centers. He assesses SPAWAR's effectiveness in overseeing R&D centers, and in dealing with the WSA&E and antisubmarine warfare functions. The interview concludes with VADM Rowden's description of the effect of the two-star direction of WSA&E.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
Baggett, VADM Lee
Clark, VADM Glenwood
Colvard, Dr. James
Hays, ADM Ronald
Hogg, ADM James
Lehman, John
Metcalf, VADM Joseph
Meyer, RADM Wayne

Paisley, Melvyn
Rickover, ADM Hyman
Vogt, RADM Larry
Watkins, ADM James
Weaver, RADM John
White, ADM Steven
Wilkinson, VADM Joseph
Wolkensdorfer, RADM Daniel

Institutions:

Bureau of Aeronautics
Bureau of Ordnance
Bureau of Ships
Center for Naval Analyses
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Center

Naval Ordnance Systems Command
Naval Sea Systems Command
Naval Ships Systems Command
Office of Management and Budget
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command

Subjects:

AEGIS Program
Antiair warfare
Antisubmarine warfare (ASW)
Disestablishment of NAMVAT
Electronic warfare
Establishment of SPAWAR

"Haul Down" report
Navy Industrial Fund
Research and development
Sound Surveillance System
Warfare systems architecture and engineering

ROWNTREE, DR. ROBERT F.

Interviewer: Leroy L. Doig, III

Date of Interview: June 7, 21, 1989

Documentation: Tapes, 119 page transcript

Abstract: Dr. Rowntree discusses his career at NWC and how a chance meeting in graduate school led him to China Lake and into operations research; the establishment of Navy Scientific and Technical Intelligence programs, including STILO; the beginnings of the Joint Munitions Effectiveness Manuals; weapons requirements studies; nuclear weapon studies; planning and budgeting systems (local and DOD wide); and other operations-research oriented efforts at NWC. He spends considerable time on the origins, operations, and contributions of the Vietnam Laboratory Assistance Program. Dr. Rowntree also discusses the technology base funding bureaucracy and the decline of tech base work in the Navy labs, the development and operation of block funding, and the advance of the bureaucracy. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Colladay, Dr. Glover S.

Doig, Leroy L., Jr.

Freeman, RADM Rowland G., III

Hillyer, Robert

Kistler, Dr. Richard E.

Knemeyer, Franklin H.

McLean, Dr. William B.

Milburn, Dr. Thomas

Riggs, Leroy

Rogers, Dr. Marguerite M.

Institutions:

Atomic Energy Commission/Department of
Energy

David Taylor Naval Ship R&D Center

Naval Intelligence Support Center

Naval Ordnance Laboratory (Corona)

Naval Weapons Center

Navy Radiological Defense Laboratory

Other Entries:

Block funding

Budget structure

Deterrence

Fleet support

Intelligence

Joint Munitions Effectiveness Manuals

Project Michelson

Scientific and Technical Intelligence
programs

Special warfare

Strategic studies

Technology base funding

Vietnam war, laboratory support

Weapons concepts

ROY, DR. MAX

Interviewer: Albert B. Christman

Date of Interview: January 1967

Documentation: 10 page transcript, index

Abstract: Dr. Roy speaks about the establishment of the Salt Wells Pilot Plant (SWPP) and the types of bombs made there. He discusses the establishment of the atom bomb plant at Inyokern, California, and the different components made at Inyokern and Albuquerque, NM. Roy also tells why SWPP was closed.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Parsons, RADM William S.

Institutions:

Naval Ordnance Test Station
Salt Wells pilot plant

RUCKNER, RADM EDWARD A.

Interviewer: Unknown

Date of Interview: October 1973 and May 1975

Documentation: 571 page transcript, index

Abstract: RADM Ruckner discusses his education at the Naval Postgraduate School and MIT, his work on radar with ADM Rivero, and his tenure as Deputy CNO for Development. He also describes his tours of duty on the Ships Characteristics Board, and as Ordnance Officer at the Naval Proving Ground.

Repositories: USNA, USNI, NWCN

Individuals Mentioned:

Rivero, ADM Horacio

Institutions:

Bureau of Ordnance
Massachusetts Institute of Technology

Naval Postgraduate School
Naval Proving Ground

Subjects:

Deputy Chief of Naval Operations
(Development)
Ordnance

Radar
Rivero, ADM Horacio
Ships Characteristics Board

RUCKNER, RADM EDWARD A.

Interviewer: Peter Bruton and an unknown interviewer

Date of Interview: September 9, 1974

Documentation: 3 tapes, 87 page transcript, index

Abstract: RADM Ruckner discusses Bureau of Ordnance R&D objectives, differences between BUORD's operation and those of other bureaus, and technical direction in BUORD labs. He explains the BUORD lab evaluation process, how contractors were selected, and how ordnance was inspected. Ruckner describes trends and issues in BUORD from 1940 to 1948 and his tenure as Assistant Chief for R&D-BUORD. He talks about how R&D money was obtained, BUORD's relations with ONR, and the establishment of the ASN (R&D). Ruckner also mentions BUORD's relations with OPNAV, DCNO, and ASN (R&D) and relates how DCNO (Development) was created and what its functions are. Lastly, he also discusses major trends and issues in R&D from 1958 to 1973, including important program successes, expansion of the DDR&E staff, and the centralization of Navy labs into the Centers.

Repositories: DTRC

Individuals Mentioned:

Bennett*, RADM Rawson
Foster, Dr. John S.
Frosch, Dr. Robert A.

McNamara, Robert S.
Wakelin, Dr. James H.

Institutions:

Bureau of Ordnance
Office of Assistant Secretary of the
Navy (R&D)
Office of Chief of Naval Material

Office of Director of Defense Research
and Engineering
Office of Naval Research

Subjects:

Bureau of Ordnance
Contracting
Deputy Chief of Naval Operations
(Development)
Director of Defense Research and
Engineering

Funding
Laboratory organization
Ordnance

RUMPF, RICHARD

Interviewer: Dr. Joseph Marchese

Date of Interview: April 23, 1990

Documentation: 1 tape, 28 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Rumpf initially provides his professional background and details the reasons behind the creation of SPAWAR. He describes the transformation of NAVELEX into SPAWAR and the effect of Dr. Colvard's "Haul Down" report on this phenomenon. He also describes how the concept of SPAWAR preceded its creation. Mr. Rumpf discusses the rationale for transferring the R&D centers from OCNR to SPAWAR and addresses the support for the move as well as the opposition to it. Mr. Rumpf tackles the issue of the R&D centers' funding WSA&E and delineates the value of keeping the R&D centers together as a corporate body. Mr. Rumpf then outlines the roots of WSA&E and discusses the effectiveness of OPNAV in systems integration. He provides a brief history of ASW integration in ASW Systems Program Office (PM-4) and mentions the causes behind NAVAIR and NAVSEA absorbing ASW functions from SPAWAR. He details the space concept developed in the Navy and assesses the effectiveness of SPAWAR. Mr. Rumpf provides details of the new alignment of the DNL under the ASN/RD&A and compares that to the difficulties the DNL experienced when the office was double hatted under NAVMAT. Mr. Rumpf provides an assessment of WSA&E, and discusses the problems in SPAWAR caused by the personality of its first Commander. He elaborates on the funding issue for WSA&E and concludes by identifying changes he sees occurring in SPAWAR.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
Baggett, VADM Lee
Busey, ADM James
Cann, Gerald
Clark, VADM Glenwood
Claytor, W. Graham
Colvard, Dr. James
Doak, Robert
Dorman, RADM Craig
Evans, RADM Thomas
Faught, Thomas

Hogg, ADM James
Lehman, John
Malley RADM Kenneth
Mooney, RADM John Bradford
Paisley, Melvyn
Schiefer, Gerald
Tuttle, VADM Jerry
Watkins, ADM James
Weaver, RADM John
Wilson, RADM John, Jr.

Institutions:

Department of the Navy
Johns Hopkins University/Applied Physics
Laboratory
Marine Corps Research, Development, and
Acquisition Command
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Ordnance Systems Command

Naval Research Laboratory
Naval Sea Systems Command
Naval Space Command Activity
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Office of the Chief of Naval Research
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command

Subjects:

Antisubmarine warfare (ASW)
Command control, and communication
Defense Management Review
Director of Navy Laboratories
Disestablishment of NAVMAT
Electronic warfare
Establishment of SPAWAR
"Haul Down" report
Joint Tactical Information Distribution
System

Operational requirement
Operations and maintenance, Navy
Outer air battle
Program Objectives Memorandum (POM)
Research, development, test, and
evaluation (RDT&E)
Top-level warfare requirements
Warfare systems architecture and
engineering

RUSSELL, ADM JAMES S.

Interviewer: Albert B. Christman

Date of Interview: May 1970

Documentation: 17 page transcript, index

Abstract: ADM Russell first details his own background at CalTech and the Bureau of Aeronautics. He discusses Dr. Theodore von Karman and how--with the help of Andrew Haley--he began to manufacture things for the Army. Russell also comments on the relationship between BUAER and BUORD, including the influence of ADM McCain in Navy R&D and the battle over cognizance at NOTS/NWC.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Haley, Andrew

Karman, Dr. Theodore von
McCain, ADM John S.

Institutions:

Bureau of Aeronautics
Bureau of Ordnance

California Institute of Technology
North Atlantic Treaty Organization

Subjects:

Bureau of Aeronautics
Bureau of Ordnance
Haley, Andrew

Karmen, Dr. Theodore von
McCain, ADM John
Rocket engines

SAGDAHL, JOHN

Interviewer: Nelson Wood

Date of Interview: May 21, 1977

Documentation: Tapes, transcript

Abstract: Mr. Sagdahl speaks of his work as general foreman for the MK 43 Torpedo.

Repositories: NUM

Subjects:

Torpedoes

Other Entries:

Aircraft launched torpedos
Torpedo Mark 43

SAGE, DR. BRUCE

Interviewer: Albert B. Christman

Date of Interview: December 1966

Documentation: 30 page transcript, index

Abstract: Dr. Sage discusses the selection of NOTS sites for pilot plant operations, and the construction of the Salt Wells and China Lake Pilot Plants. He talks about the Michelson Laboratory at China Lake, the land selection for the plants, and Dr. Charles C. Lauritsen's motivations.

Repositories: DTRC, NWC, NHC

Individuals Mentioned:

Byrnes, CAPT James
Lauritsen, Dr. Charles C.

Parsons, RADM William S.
Sabin, Palmer

Subjects:

China Lake pilot plant
Lauritsen, Dr. Charles C.

Michelson Laboratory
Salt Wells pilot plant

ST. AMAND, DR. PIERRE

Interviewer: Unknown

Date of Interview: March 27, 1981

Documentation: 38 page transcript, index

Abstract: Dr. St. Amand discusses his weather modification and atmospheric studies, and his work in geophysics and oceanography. He comments on NOTSNIK, weather modification in Vietnam, and politics and weather warfare. St. Amand reminisces about NWC personnel; in particular, Dr. Haskell G. Wilson, Walter LaBerge and Dr. William B. McLean. He also talks about the scientific contributions of the Center.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

LaBerge, Dr. Walter B.
McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

LaBerge, Dr. Walter	Vietnam War
McLean, Dr. William B.	Weather modification research
NOTSNIK satellite	Wilson, Dr. Haskell G.

SANDERSON, DR. JOHN A.

Interviewer: Dr. David K. Allison

Date of Interview: August 31, 1977

Documentation: 3 tapes, index

Abstract: This interview is a supplement to the oral history interview with Dr. Edward O. Hulburt and talks about Hulbert's associates.

Repositories: NRL

Individuals Mentioned:

Hulburt, Dr. Edward O.

Institutions:

Naval Research Laboratory

Subjects:

Optics

SANDLER, CHARLES

Interviewer: Dr. Joseph Marchese

Date of Interview: August 14, 1989

Documentation: 3 tapes, 64 page transcript, index

Abstract: This interview is one of a series conducted to gather material for a history of the MK 48 Torpedo development program. Sandler discusses his background and gives a brief history of torpedo development during the Second World War, and his efforts to improve it as head of torpedo development in the Bureau of Ordnance. In the context of the development of the MK 48, Sandler comments on coordination of design and engineering efforts, propulsion systems, guidance systems, and acoustics systems. Sandler also discusses the development approaches taken by Westinghouse and Clevite, the two main competitors for the MK 48 contract, the competition and eventual selection of Clevite's design, the overall management of the development program, the use of in-house versus contractor development and the overall goals and management of weapons systems development.

Repositories: DTRC

Institutions:

Bell Telephone Laboratories
Bureau of Ordnance
Clevite Corporation
General Electric Corporation
Harvard Underwater Sound Laboratory

Naval Ocean Systems Center
Naval Surface Weapons Center
Office of Naval Research
Ordnance Research Laboratory
Westinghouse Electric Company

Subjects:

Engineering development
Fixed-price contracting
Homing systems
Hydrodynamics/hydroballistics
MK 48 torpedo

Propulsion systems
Research management
Torpedo development
Weapons systems design

SANDQUIST, CAPT OSCAR

Interviewer: Albert B. Christman

Date of Interview: July 6, 1966

Documentation: 26 page transcript, index

Abstract: CAPT Sandquist tells about the birth of NOTS in Inyokern, California, the recruitment of labor, and contractors at NOTS. He describes the logistics of construction, and at the same time cooperating with the CalTech scientists on the missile ranges nearby. Next, he discusses the master plan of the site, water problems, labor problems, budgets, postwar plans and construction. Sandquist also reflects on the first weapons systems to come out of NOTS, including the Sidewinder missile.



CHARLES SANDLER
CIRCA 1970

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Byrnes, CAPT James
Michelson, Dr. Albert A.

Institutions:

California Institute of Technology
Naval Ordnance Test Station

Subjects:

Naval Ordnance Test Station
Sidewinder Missile Project

SAWYER, DR. RALPH A.

Interviewer: Albert B. Christman

Date of Interview: May 1967

Documentation: 55 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons and also partly to record the history of NOTS at Inyokern, California. Dr. Sawyer discusses his work at the Armor and Projectile Laboratory at the Naval Proving Ground at Dahlgren, Virginia, his relations with CAPT Hedrick, the CO there, and his impressions of Parsons. He describes subsequent promotion to Head of Research at NOTS, his work on Crossroads, and other research at NOTS. He evaluates Parsons as a man and as an officer and comments on Dr. Louis T. E. Thompson.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Blandy, ADM George
Bradbury, Dr. Norris E.
Hedrick, CAPT David

Loeb, Dr. Leonard
Parsons, RADM William S.
Thompson, Dr. Louis T. E.

Institutions:

Armor and Projectile Laboratory
Naval Ordnance Test Station
Naval Proving Ground

Subjects:

Hedrick, CAPT David
Naval Ordnance Test Station
Operation Crossroads

Parsons, RADM William S.
Thompson, Dr. Louis T. E.

SAWYER, DR. RALPH A.

Interviewer: Jack Brooks, Jr.

Date of Interview: May 24, 1974

Documentation: 7 page transcript

Abstract: This interview is the Chapter V of Dahlgren, edited by Kenneth G. McCollum. Dr. Sawyer tells how he came to Dahlgren as a Naval Officer to do spectrographic analysis at the newly constructed Armor and Projectile Laboratory, mentions his co-workers, Dr. L. T. E. Thompson and CAPT Leonard Loeb, the size of his staff, the most significant achievements of the A&P Laboratory, his latter work on the Manhattan Project.

Repositories: NSWC

Individuals Mentioned:

Loeb, Dr. Leonard

Thompson, Dr. Louis T. E.

Institutions:

Armor and Projectile Laboratory

Naval Proving Ground

Subjects:

Manhattan Project

Ordnance

**SCARBROUGH, ROBERT
COFFEY, STEVEN**

Interviewer: Dr. Joseph Marchese and Alan Smith

Date of Interview: May 9, 17, 1990

Documentation: 3 tapes, 67 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Messers Coffey and Scarbrough discuss the role Booz-Allen, Hamilton, Inc. played in the 1981 reorganization of NAVELEX and delineate the outcome of that reorganization. They provide details about the top-level people who were involved in the reorganization and address problems discovered in the implementation of the reorganization. The two men elaborate on the working committees between ELEX-06 and ELEX-08 and consider the funding problems facing the new organization. Mr. Coffey and Mr. Scarbrough discuss the strengths of the reorganization and address the reaction within NAVELEX to the reorganization. Of further interest is the impact of the 1981 reorganization on integrated systems engineering and the issue of progress in the acquisition process. Both men elaborate on the issue of external factors that encouraged a reorganization of NAVELEX in 1981 and then discuss the structure of that reorganization. Messers Coffey and Scarbrough then consider Booz-Allen, Hamilton's involvement in the 1985-1986 reorganization. The men continue by examining Booz-Allen, Hamilton's role in the creation of WSA&E function as well as CDR Marvin Langston's involvement in its inception and the influence

the AEGIS program had on WSA&E. Mr. Coffey and Mr. Scarbrough deliberate on the impact the Strategic Systems Project Office (SSPO) and VADM Glenwood Clark had on the development of WSA&E. Also of interest is the issue of support from the Office of the Chief of Naval Operations (OPNAV) for WSA&E, in particular, the role OP-095 had in supporting the new program. Messers Coffey and Scarbrough discuss the power struggle within OPNAV regarding control of WSA&E and then compare differences between funding by SSPO for its subelements and funding difficulties experienced by SPAWAR for WSA&E. Also discussed was the relationship between SPAWAR and the other systems commands; the relationship and differences found between SPAWAR and OPNAV; and SPAWAR's efforts to convince OPNAV of the superset concept it had developed for WSA&E. The gentlemen then address the problems caused by the numerous personnel changes in the Warfare Systems Architecture and Engineering Directorate, SPAWAR 30, and the issue of the final placement of the R&D centers. They consider SPAWAR's relationship with NOSC and the other R&D centers as well as the issue of overhead funding through the R&D centers for SPAWAR 30. They note the similarities between the early organization of SPAWAR and that of the disestablished NAVMAT. Also of interest are the goals established for the 1985-86 reorganization and Booz-Allen, Hamilton's perception of NAVELEX. Mr. Coffey and Mr. Scarbrough elaborate on the relationship between SPAWAR 30 and the other program directorates, especially PDs 50 and 60. The men address the problem of using military leadership in the WSA&E organization and provide some insight into the organization of PD 70 and the creation of SPAWAR 10. They also detail ADM Grich's influence in SPAWAR 003 and compare SPAWAR 004 with PD 40.

Repositories: DTRC

Individuals Mentioned:

Clare, Dr. Thomas
 Clark, VADM Glenwood
 DiMascio, Dr. A. J.
 Doak, Robert
 Dorman, RADM Craig
 Falk, CAPT N. D.
 Grich, RADM Richard
 Hogg, ADM James
 Holt, CAPT Richard
 Langston, CDR Marvin
 Lehman, John
 McBurnett, Genie

Meyer, RADM Wayne
 Miller, RADM Joseph
 Mills, James
 Mooney, RADM John Bradford
 Pollard, Dr. James R.
 Spero, CAPT J. R.
 Topping, RADM Robert
 Vincent, Deborah
 Watkins, ADM James
 Weaver, RADM John
 Young, Robert

Institutions:

Department of Defense
 Johns Hopkins University/Applied Physics
 Laboratory
 Naval Air Development Center
 Naval Air Systems Command
 Naval Electronic Systems Command
 Naval Material Command
 Naval Ocean Systems Center

Naval Sea Systems Command
 Naval Weapons Center
 Office of Naval Acquisition Support
 Office of Naval Research
 Office of the Chief of Naval Operations
 Office of the Chief of Naval Research
 Space and Naval Warfare Systems Command
 Strategic Systems Project Office

Subjects:

AEGIS program
Antiair warfare
Antisubmarine warfare (ASW)
Antisurface warfare
Clark, VADM Glenwood
Command control, communication and intelligence
Communication Support System
Critical Interdependency Study
Disestablishment of NAVMAT
Establishment of SPAWAR
Fleet Command Center
Force-pervasive
Integrated systems engineering
Logistics support engineering

Matrix organization
Naval Electronic Systems Command
Platform specific
Principal technical agent
Reconnaissance, Electronic Warfare, Special Operations, Intelligence Evaluation (REWSON) Program
Shipboard Non-tactical ADP Processing program
Strike warfare
Tactical Support System
TOMAHAWK cruise missile program
Warfare Support System
Warfare systems architecture and engineering

SCHICK, RADM GEORGE

Interviewer: Dr. Joseph Marchese

Date of Interview: March 29, 1990

Documentation: 1 tape, 17 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Schick begins by describing his role, as Commander of NAVELEX, in the acquisition process, and how he worked within a previously established reorganization program at NAVELEX. He then discusses the disestablishment of NAVMAT, and the reasons for transforming NAVELEX into SPAWAR. RADM Schick describes Secretary John Lehman's preference for vertical management, and the reactions of other systems commands to the placement of the WSA&E function within SPAWAR. The organizational placement of research and development centers is discussed next. Finally, RADM Schick comments on the removal of platform-specific programs from SPAWAR, soon after SPAWAR received the WSA&E function.

Repositories: DTRC

Individuals Mentioned:

Clark, VADM Glenwood
Colvard, Dr. James
Fowler, VADM Earl
Lehman, John

Paisley, Melvyn
Rowden, VADM William
Watkins, ADM James
Wessel, Paul

Institutions:

Andrulis Research Corporation
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Ocean Systems Center
Naval Sea Systems Command
Space and Naval Warfare Systems Command

Subjects:

Antiair warfare
Antisubmarine undersea warfare
Antisubmarine warfare (ASW)
Command control, communication, and intelligence
Cost overruns
Disestablishment of NAVMAT
Establishment of SPAWAR
Force-pervasive programs
Horizontal management
Joint Tactical Information Distribution System

Naval Electronic Systems Command
Platform-unique programs
Reconnaissance, Electronic Warfare, Special Operations, Intelligence Evaluation (REWSON) Program
Role of research and development centers
Systems acquisition
Vertical management
Warfare systems architecture and engineering

SCHIEFER, GERALD

Interviewer: Dr. Joseph Marchese

Date of Interview: November 1, 1991

Documentation: 2 tapes, 34 page transcript, index

Abstract: This interview is primarily devoted to a description of the planning stages (1990-1991) of the extensive research, development, test, and evaluation (RDT&E) consolidation and closures. Mr. Schiefer, Director of Navy Laboratories during this period, first discusses the reasons he was chosen as DNL, his specific missions in that capacity, his personal objectives, and his activities prior to planning the consolidations. He comments on his relationships with the Commanding Officers and Technical Directors of the research and development (R&D) centers, with the leadership in the Space and Naval Warfare Systems Command, the Naval Sea Systems Command, and the Naval Air Systems Command, with the Office of the Chief of Naval Research, and with the Secretariat. Mr. Schiefer then provides detailed information on the committees and study groups that planned the Navy's extensive RDT&E consolidation and closures. He discusses the roles of the Office of the Secretary of Defense, the Navy Secretariat, the Office of the Chief of Naval Operations, the systems commands, the DNL, the R&D centers, and the engineering centers. He also addresses the issue and the wisdom of placing the R&D centers within the oversight of the systems commands and of disestablishing the DNL. He speculates concerning the assignment of proper roles for the new full-spectrum centers, how they might interact with the R&D centers, and whether a DNL-type position might again be established. Finally, Mr. Schiefer comments on his major concerns regarding the new organization, his feelings about his role in the consolidation, and the need for a better corporate memory in the Navy.

Repositories: DTRC

Individuals Mentioned:

Ailes, RADM Robert
Cann, Gerald
Cantrell, RADM Walter
Coffey, Dr. Timothy
Colvard, Dr. James
Donegan, RADM John, Jr.
Friichtenicht, RADM Richard
Gentz, VADM Richard
Hekman, VADM Peter
Johnson, Dr. Robert S.
Johnson, Dr. Robert V.
Law, Howard
McBurnett, Genie

Miller, RADM William
Reynolds, RADM Guy
Rumpf, Richard
Schafer, Jacqueline
Smith, VADM William
Stern, RADM George
Strohsahl, RADM George
Tarbell, William
Urban, Robert
Vaughn, Robert
Weaver, RADM John
Wessel, Paul
Wilson, RADM John, Jr.

Institutions:

Center for Naval Analyses
Department of Defense
Director of Navy Laboratories
Naval Air Development Center
Naval Air Systems Command
Naval Material Command
Naval Oceanographic and Atmospheric
Research Laboratory

Naval Research Laboratory
Naval Sea Systems Command
Navy Laboratory/Center Coordinating
Group
Office of the Secretary of Defense
Space and Naval Warfare Systems Command

Subjects:

Adolph Commission
Cobra Model for RDT&E consolidation and
closure
Commanding Officers
Consolidation/closure in Navy's material
establishment
Defense Management Review
Full-spectrum centers
Gavazzi Report: "Report of the CNM Ad
Hoc Group on Functional Realignment"
(1974)

Messere Study: "Naval Material Command
R&D Centers" (1983)
Research and development centers
Systems engineering
Technical directors
Technology base funding

SCHIRRA, CAPT WALTER M.

Interviewer: Leroy L. Doig, III

Date of Interview: June 26, 1982

Documentation: Tape, 20 page transcript, index

Abstract: CAPT Schirra discusses his assignment to China Lake as a Sidewinder test pilot during 1952 to 1954; he comments on the value of laboratory experience, the NOTS Experimental Officers he worked for (Moorer, Connolly, and Walker), the Sidewinder program, various military aircraft, military-civilian relationships, the China Lake community, and the role of the Navy laboratories.

Repositories: NWC

Individuals Mentioned:

Connolly, VADM Thomas F.
LaBerge, Dr. Walter B.
McLean, Dr. William B.

Moorer, ADM Thomas H.
Walker, VADM Thomas J.
Wilcox, Dr. Howard A.

Institutions:

Naval Air Test Center
Naval Weapons Center

Other Entries:

Connally, VADM Thomas F.
Military aircraft
Military-civilian relationships
Moorer, ADM Thomas H.
Naval Weapons Center

Navy laboratories
Sidewinder Missile Project
Test pilots
Walker, VADM Thomas J.

SCHNEIDER, RADM RAYMOND

Interviewer: Unknown

Date of Interview: January 7, 1975

Documentation: 2 tapes

Abstract: This extensive interview is devoted to the changing structure of Naval R&D since World War II. The structure of BUAER in relation to R&D is discussed, with particular attention on production, postwar military cutbacks, and the role of the Joint Research and Development Board. RADM Schneider elaborates on the reasons for the creation of program management offices, and the resulting overlaps and confusion in the lines of authority. He describes the beginnings of the systems commands, their operations regarding R&D, and the eventual separation of R&D from Research and Technology. Finally, RADM Schneider addresses the topics of matrix management as well as current contracting trends and problems.

Repositories: DTRC

Individuals Mentioned:

Galantin, ADM Ignatius
McNamara, John
Probus, Dr. James H.

Institutions:

AERO-5
Bureau of Aeronautics
Bureau of Ordnance
Bureau of Weapons
Congress

Department of Defense
Joint Research and Development Board
Naval Electronic Systems Command
Naval Material Command
Office of Management and Budget

Subjects:

Acquisition
Aeronautical research
Fixed-price contracting

In-house, out-of-house mix of work
Matrix organization
Research and development

SCHOEFFEL, RADM MALCOM F.

Interviewer: Albert B. Christman

Date of Interview: April 21, 1966

Documentation: 11 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. RADM Schoeffel reflects on NOTS and the Michelson laboratory. He comments on RADM Parsons as Deputy Chief of Bureau of Ordnance.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Hussey, VADM George F.

Parsons, RADM William S.

Thompson, Dr. Louis T. E.

Institutions:

Michelson Laboratory

Naval Ordnance Test Station

Subjects:

Parsons, RADM William S.

SCHOENHERR, DR. KARL E.

Interviewer: Dr. David K. Allison

Date of Interview: April 15, 20, and 27, 1982

Documentation: 8 tapes, 153 page transcript

Abstract: Dr. Schoenherr talks about his background and education, serving as an apprentice seaman, entering MIT to study naval architecture, and his first experience with the Experimental Model Basin--testing yacht models for a school project. He discusses the EMB in 1922, his coworkers, the carriage, the size and type of staff, RADM David Taylor, the relationship between EMB and the Bureau of Construction and Repair, testing procedures, and the inadequacy of the EMB. He mentions the importance of the development of the bulbous bow and Taylor's Standard Series, cavitation studies in the 1930s, the search for a new basin site, acoustic decoys for World War II German torpedoes, torpedo and submarine research and development during World War II, the wind tunnel, and the influence of airship design on on torpedos. He gives his impressions of CAPT Saunders and CDR Wright, NSRDCs relations with BUSHIPS, post-war changes in organization, speaks of leaving the Center to become Dean of Engineering at Notre Dame, returning to the Model Basin in 1958, work on underwater acoustics, and the balance between testing and research.

Repositories: DTRC

Individuals Mentioned:

Eggert, CAPT Ernest F.
Gertler, Morton
Hewins, Dr. Lyman
Karman, Dr. Theodore von
Keil, Dr. Alfred H.
Landweber, Dr. Louis
McEntee, CAPT William

Rickover, ADM Hyman
Sam, Dr. Albert
Saunders, CAPT Harold E.
St. Denis, Manley
Taylor, RADM David W.
Wright, RADM Edward Alvey

Institutions:

Bureau of Construction and Repair
Bureau of Ships
Experimental Model Basin

Johns Hopkins University
Massachusetts Institute of Technology
Notre Dame

Subjects:

Airships
Cavitation
Experimental Model Basin
Propellers
Saunders, CAPT Harold E.

Taylor, RADM David W.
Torpedoes
Underwater acoustics
Wright, RADM Edward A.

Other Entries:

Bulbous bow
Mine Mark 24

Model testing
Naval architecture

SCHOMAN, DR. CHARLES M.

Interviewer: Dr. David K. Allison

Date of Interview: July 26, 1982

Documentation: 1 tape, index

Abstract: Dr. Schoman describes the organizational structure of DTNSRDC, his position as Director of Plans & Programs, the Five Year Planning process, and the work of Center committees.

Repositories: DTRC

Individuals Mentioned:

Allen, Dr. Robert
Powell, Dr. Alan

Institutions:

David Taylor Naval Ship Research and Development Center

Subjects:

David Taylor Naval Ship Research and Development Center
Five year plan
Laboratory management



DR. KARL E. SCHOENHERR
OPERATING AND DATA COLLECTING ON TOWING CARRIAGE
OF EXPERIMENTAL MODEL BASIN

SCHUYLER, RADM GARRET LANSING

Interviewer: Albert B. Christman

Date of Interview: May 1969

Documentation: 27 page transcript, index

Abstract: RADM Schuyler talks about post-World War II research and a special board he served which settled rows in different sections of BUORD. He comments on Dr. Thompson's work at the Naval Proving Ground as well as other scientists associated with that facility. Schuyler discusses the proximity fuze and Eisenhower's military-industrial complex speech.

Repositories: NWC, DTRC

Individuals Mentioned:

Edison, Thomas

Eisenhower, Dwight D.

Goddard, Dr. Robert

Mitchell, BGN William

Thompson, Dr. Louis T. E.

Institutions:

Bureau of Ordnance

Naval Proving Ground

Subjects:

Inventors

Ordnance

Thompson, Dr. Louis T. E.

Other Entries:

Military-Industrial complex

Proximity fuze

SCOTT, DAVID

Interviewer: Steven J. Dick

Date of Interview: 1988

Documentation: Tapes

Abstract: Mr. Scott describes his years at the Naval Observatory, c. 1954 to 1988.

Repositories: USNO

Subjects:

Surveying and astronomy

SETTE, DR. WILLIAM J.

Interviewer: Dr. David K. Allison

Date of Interview: October 15, 1982

Documentation: 2 tapes, index

Abstract: Dr. Sette talks about his background, initial impression of the Experimental Model Basin, early work on shock testing and propeller cavitation, involvement of the Basin in World War II operations, airblast and gunblast effects, Operation Crossroads, and his view of the Carderock-Annapolis Laboratory merger.

Repositories: DTRC

Individuals Mentioned:

Keil, Dr. Alfred H.
Mumma, RADM Albert G.

Strasberg, Dr. Murray
Windenburg, Dr. Dwight F.

Institutions:

Applied Mechanics Laboratory
David Taylor Model Basin
David Taylor Naval Ship Research and
Development Center

Experimental Model Basin Hydrodynamics
Division
Marine Engineering Laboratory
Underwater Explosives Research Division

Subjects:

Cavitation
Shock

Other Entries:

Independent Research/Independent
Exploratory Development
Operation Crossroads

SEVIK, DR. MAURICE

Interviewer: Dr. Rodney Carlisle and Diane Belanger

Date of Interview: March 8, 1985

Documentation: 10 page transcript

Abstract: Dr. Sevik discusses his academic and employment background; the nature of acoustics work; the nature of the American political system; the use of computers; methods of acoustics testing; and some unclassified acoustics developments.

Repositories: DTRC

Individuals Mentioned:

O'Donnell, Mr.
Powell, Dr. Alan
Ross, Dr.

Institutions:

Lake Pend'Oreille, Idaho
Penn State University
Puget Sound Naval Shipyard

Other Entries:

Acoustics

SEWELL, ROBERT G.

Interviewer: Mickey Strang

Date of Interview: October 14, 1975

Documentation: 27 page transcript, index

Abstract: Mr. Sewell comments on the Vietnam Laboratory Assistance Program--how men were selected to go, how they travelled to Vietnam with lab equipment, and technical support from NOTS. He discusses being a civilian in uniform, life in the Navy at sea and in Saigon, and cutting military red tape. Sewell also talks about the Sidewinder and Walleye Missile Projects.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Gould, Al
Johnson, Dr. Gerald

Institutions:

Naval Ordnance Test Station

Other Entries:

Sidewinder Missile Project	Vietnam War
Vietnam Laboratory Assistance Program	Walleye missile project

SEWELL, ROBERT G.

Interviewer: Mickey Strang

Date of Interview: August 26, 1975

Documentation: Index

Abstract: Mr. Sewell explains why he came to NOTS-China Lake, and why testing there is more expensive than other labs. He comments on the role of William B. McLean at NOTS and an engineer's pursuit of excellence--he cannot stand to be wrong. Sewell talks about changes in the NOTS organization and Junior Professional Training, as well as the initial team recruited for NOTS. He noted that by 1950, NOTS original projects had been completed and the lab had to find new things to do.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

McLean, Dr. William B.
Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

McLean, Dr. William B.
Naval Ordnance Test Station

SEYMOUR, VADM E. R.

Interviewer: Leroy L. Doig, III and Dr. David K. Allison

Date of Interview: June 12, 1983

Documentation: Tapes, 36 page transcript

Abstract: VADM Seymour was COMNAVAIR from 1980-1983. The discussion includes concept and place of the laboratories, contractors versus laboratories, organization, NAVMAT versus NAVAIR activities, military-civilian relationships, projects--including Maverick and Skipper--and NWC as an example of good and bad in laboratories.

Repositories: NWC

Institutions:

Naval Air Systems Command
Naval Material Command
Naval Weapons Center

Other Entries:

Contracting	Military-civilian relationships
Laboratory management	Naval Air Systems Command
Maverick missile	Naval Material Command

SEYMOUR, VADM E. R.

Interviewer: Dr. William J. Armstrong

Date of Interview: July 13, 1983

Documentation: 1 tape

Repositories: NAVAIR

Institutions:

Naval Air Systems Command

SEYMOUR, DR. HARRY R.

Interviewer: Roger Kempler

Date of Interview: June 29 and August 18, 1982

Documentation: 27 page transcript

Abstract: Dr. Seymour describes his perception of NRAC, the establishment of NPRDC, the relative merits of BUPERS and NAVMAT sponsorship, the changing role of NPRDC's Washington representative, its major accomplishments, the influence of his military service on his decision to enter personnel research, the Special Projects Units, personnel research programs of the 1950s, the general attitude of the Navy toward personnel research, major figures in research during the post-war era, and his thoughts on improving management of Naval R&D. He talks of his major goals as NPRDC's Washington liaison officer, basic versus applied research, problems associated with justifying personnel R&D in relation to hardware R&D, the relative impact of personnel R&D in the fleet today, the NRAC sub-panel's concern over the amount of applied research performed by NPRDC, his views on the GAO review, and NPRDC's size as a key to its effectiveness.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Bryan, Dr. Glenn L.	Price, D. George
Carstater, Dr. Eugene	Regan, Dr. James J.
Clarkin, CAPT James J.	Rostker, Dr. Bernard
Collins, Dr. John	Sjoholm, Dr. Allan A.
Elster, Dr. Richard	Watkins, ADM James
Marcy, H. Tyler	Wiskoff, Dr. Martin
Parker, CAPT Donald F.	

Institutions:

Naval Research Advisory Committee
Navy Personnel Research and Development Center

Subjects:

Applied research	General Accounting Office review
Basic research	Personnel research

SHARPLESS, STEWART

Interviewer: Steven J. Dick

Date of Interview: October 5, 1988

Documentation: Tape, 24 page transcript

Abstract: Dr. Sharpless describes his years at the Naval Observatory, 1953 to 1963, especially his work in spectroscopy.

Repositories: USNO

Subjects:
Astronomy

SHEEHY, MYLES

Interviewer: Albert B. Christman

Date of Interview: March 1978

Documentation: 1 tape, 12 page transcript

Abstract: Mr. Sheehy describes his years at NEL in San Diego, in particular, his role during World War II. Note: the transcription of this interview is poor. Key terms are repeatedly omitted either purposefully of because poor tape quality. There is no page 11.

Repositories: DTRC

Institutions:
Naval Electronics Laboratory

Subjects:
Naval Electronics Laboratory

SHERWIN, DR. CHALMERS

Interviewer: Dr. Samuel Rothman

Date of Interview: 1974

Documentation: 30 page transcript, index

Abstract: Dr. Sherwin talks about the original purpose of DDR&E, funding for labs, and the dissatisfaction that led to lab re-organization. He comments on the image of Navy labs, the reason for the McNamara memo concerning lab re-organization, and new innovations in technology. He also discusses the management of the labs, basic research done by labs, DDR&E, and centralization in DoD. Sherwin sees the need for a Historical Evaluation Group to continually evaluate technical and management decisions.

Repositories: NWC, DTRC

Individuals Mentioned:
Glass, Dr. Edward
McLean, Dr. William B.
McNamara, Robert S.

Institutions:
Office of the Director of Defense Research and Engineering

Other Entries:

Director of Defense Research and Engineering
Laboratory consolidations
Laboratory management

SHRADER, JOSEPH

Interviewer: Dr. Joseph Marchese

Date of Interview: March 6, 1990

Documentation: 1 tape, 30 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Shrader initially discusses these two changes, elaborating on the reasons for NAVMAT's disestablishment, and for the shift from NAVLEX to SPAWAR. He then provides information regarding the removal of platform-specific programs from SPAWAR, and SPAWAR's retention of force-pervasive programs. Mr. Shrader offers insight into the systems commands' preferences and assessments concerning the realignment of the R&D centers from NAVMAT, to CNR, to SPAWAR, and sees these changes as part of a Navy-wide attempt to improve acquisition. A description of the reaction at the Naval Sea Systems Command to the block funding appropriated for technology base work follows. Mr. Shrader then discusses the discrepancies between the theory and actual operations of SPAWAR, SPAWAR 30 (WSA&E Directorate), and PD-80 (ASW Programs Directorate). This is followed by his assessment of the performance of R&D centers since their transfer to SPAWAR. Mr. Shrader offers an explanation for the small funds WSA&E receives, and concludes by discussing the controversies involved in program transfers from SPAWAR.

Repositories: DTRC

Individuals Mentioned:

Clark, VADM Glenwood
Colvard, Dr. James
Doak, Robert
Hogg, ADM James
Lehman, John
Leuschner, RADM Robert

Paisley, Melvyn
Rowden, VADM William
Topping, RADM Robert
Watkins, ADM James
Webb, James

Institutions:

Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Sea Systems Command

Naval Ships Systems Command
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command

Subjects:

Antisubmarine warfare (ASW)
Command control, and communication
Disestablishment of NAVMAT
Electronic support measures
Establishment of SPAWAR

Naval Electronic Systems Command
Technology base funding
Total Quality Management
Warfare systems architecture and engineering

SHUGG, CARLETON

Interviewer: Unknown

Date of Interview: November 1973

Documentation: 25 page transcript

Abstract: Mr. Shugg was President of Electric Boat Company, a sub-systems contractor and builder of FBM submarines for Polaris. This is one of a series of seven interviews on concept and development of the Polaris program conducted by the U.S. Naval Institute Oral History Program.

Repositories: NHC, NWCM, USNA, USNI

Subjects:

Ballistic missile submarines
Fleet Ballistic Missiles
Nuclear missiles

Nuclear powered fleet ballistic
missile submarines
Submarine launched ballistic missiles
Weapons Systems

Other Entries:

Polaris program

SMITH, BERNARD

Interviewer: Mrs. Susan Frutkin and Dr. Peter Bruton

Date of Interview: 1974

Documentation: 4 tapes, 120 page transcript, index

Abstract: Mr. Smith explains how management of R&D facilities in DoD worked: the Pentagon formulated programs, the TD at a laboratory went to a desk man at a Bureau for money, and the desk man allocated it according to a set budget. He discusses the establishment of the ASN (R&D), quotes Sidewinder as an example of a program not managed well, and describes how foundational research money was misused. Smith comments on bureau-lab dialogues and how an individual can make a big difference in laboratory management. He explains the Bureau's feelings at the labs being placed under the CNM, the role of the DNL, and the SYSCOMs' dialogues with industry. He notes that the DNL was not an innovative force and was a poor contact between the labs and their customers. Smith states that RDT&E appropriations were not a serious problem, evaluates the success of Project 97, and says that the CNO is not competent enough to set exploratory development goals. He finds that block funding was an improvement over specific grants to the labs, Sidewinder was a success that broke all the rules, and Navy labs can afford mistakes more than private industry. Smith believes that rotation of personnel improves R&D management, that labs should be on the same level as the SYSCOMs, and that education of lab personnel should be continuous.

Repositories: NHC, DTRC

Individuals Mentioned:

Davies, RADM Thomas
Kidd, ADM Issac C., Jr.

Institutions:

Bureau of Ordnance
Naval Weapons Laboratory
Office of Assistant Secretary of the
Navy (R&D)

Office of Chief of Naval Development
Office of Chief of Naval Material
Systems commands

Other Entries:

Assistant Secretary of the Navy (R&D)
Block funding
Director of Navy Laboratories
Navy Industrial Fund
Project 97

Research and development from DoD
perspective
Sidewinder Missile Project
Technical development plan

SMITH, BERNARD

Interviewer: Cynthia Rouse

Date of Interview: June 8, 1976

Documentation: 17 page transcript

Abstract: This interview is Chapter XII of Dahlgren, edited by Kenneth G. McCollum. Mr. Smith discusses his early interest in rockets, his appointment as Technical Director of the Naval Weapons Laboratory in 1964, his opinion of work at Dahlgren in the 1950s, reorganizations and mission changes, dealings with the Systems Commands, military-civilian relationships, the effect of civil rights legislation at Dahlgren, professional development, management training, the significance of the merger with NOL, White Oak, other proposed mergers, and co-workers.

Repositories: NSWC, DTRC

Individuals Mentioned:

Bernard, Charles W.
Chase, ADM John Dawson
Colvard, Dr. James

Lyddane, Dr. Russell H.
Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Laboratory
Naval Surface Weapons Center

Naval Weapons Laboratory
Systems Commands

Subjects:

Military-civilian relationships
Naval Surface Weapons Center

Rocket research
Systems commands



BERNARD SMITH (RIGHT)
SETS UP ARS EXPERIMENTAL ROCKET NUMBER 3
FOR A PUBLIC LAUNCHING IN 1932

SMITH, DR. HOWARD C.

Interviewer: Dr. Vincent Ponko

Date of Interview: September 16, 1980

Documentation: Tapes, 34 page transcript, index

Abstract: Mr. Smith talks about military-civilian relationships, the formation of the DNL/DLP, and the work of the first two DNL/DLP's. He comments on financial controls of in-house laboratories, labs under the DNL and the bureaus, and key people in Navy R&D, including Dr. Chalmers Sherwin, Dr. Robert A. Frosch, and SECDEF Robert S. McNamara. Smith discusses organizational changes in Navy R&D; in particular, the politicizing of R&D under President Kennedy, and the role of the DNL/DLP. He describes the technical ability of Navy R&D headquarters personnel, decentralization of DoD under SECDEF Laird, and lack of incentive for technical people in the labs.

Repositories: DTRC

Individuals Mentioned:

Frosch, Dr. Robert A.
Johnson, Dr. Gerald
Kennedy, John F.
Laird, Melvin

Lawson, Dr. Joel
Sherwin, Dr. Chalmers
Towle, CAPT Bernard

Institutions:

Office of Director of Navy Laboratories

Subjects:

Decentralization of DoD
Director of Navy Laboratories
Frosch, Dr. Robert A.

McNamara, Robert S.
Military-civilian relationships
Sherwin, Dr. Chalmers

SMITH, DR. HOWARD C.

Interviewer: Glenn E. Bugos

Date of Interview: August 21, 1985

Documentation: Tapes, 34 page transcript

Abstract: The main focus of this interview is on Dr. Smith's work in the VLAP program. He discusses the origins of and principles behind VLAP, and discusses working with the Army and Air Force on VLAP projects. He also talks about the R&D administrative structure and the nature of Pentagon bureaucracy.

Repositories: DTRC

Individuals Mentioned:

Lawson, Dr. Joel
Stroop, VADM Paul D.

Sullivan, Leonard
Zumwalt, ADM Elmo

Institutions:

Naval Ordnance Laboratory
Naval Weapons Center

Other Entries:

Magnetometers
Navy Science Assistance Program

Project Iron Barnacle
Vietnam Laboratory Assistance Program

SMITH, VADM LEVERING

Interviewer: Albert B. Christman

Date of Interview: May 1967

Documentation: 18 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Smith discusses Parsons as an officer on the *USS TEXAS* and as a proponent of the Proximity fuze. He talks about Parsons' knack for spotting people's talents and his tenure as Deputy Chief of the Bureau of Ordnance. Smith also compares Parsons to Engineering Duty officers and notes Parsons' role in Navy nuclear research.

Repositories: NWC, DTRC

Individuals Mentioned:

Parsons, RADM William S.
Sides, ADM
Thompson, Dr. Louis T. E.

Institutions:

Bureau of Ordnance
Naval Ordnance Test Station

Other Entries:

Engineering Duty Officers
Parsons, RADM William S.
Proximity fuze

SMITH, VADM LEVERING

Interviewer: Elizabeth Babcock and Leroy L. Doig, III

Date of Interview: June 15, 1989

Documentation: 75 page transcript, index

Abstract: VADM Smith recalls aspects of his distinguished career in naval ordnance, focusing primarily on his assignment to NOTS from 1947 to 1954 and on his management of the Polaris system development, particularly as that program involved China Lake. He discusses numerous NOTS technical programs, including the RAM 6.5 inch antitank aircraft rocket, the Mighty Mouse 2.75 inch folding-fin aircraft rocket, the 5 inch liquid propellant aircraft rocket, and work for the Atomic Energy Commission at China Lake's Salt Wells Pilot Plant. VADM Smith also comments on the challenges he faced as a military man in a civilian position at NOTS, on the management philosophies of

Dr. L. T. E. Thompson and Dr. William B. McLean, and on the Stations' relationship with the Bureau of Ordnance and other entities in Washington, DC.

Joining her husband for the last part of the interview, Mrs. Buelah (Boots) Smith warmly recalls events and anecdotes of China Lake social life, as well as amusing incidents involving her meetings with President Ronald Reagan and ADM Hyman G. Rickover.

Repositories: NWC (parts of the interview may contain sensitive or classified information)

Individuals Mentioned:

McLean, Dr. William B.
Raborn, RADM William F.
Rickover, ADM Hyman

Sage, Dr. Bruce
Thompson, Dr. Louis T. E.
Wilcox, Dr. Howard A.

Institutions:

Atomic Energy Commission
Bureau of Ordnance
Naval Ordnance Test Station

Naval Weapons Center
Special Projects Office

Other Entries:

Bombardment Aircraft Rocket (BOAR)
China Lake community
Engineering Duty officers
McLean, Dr. William B.
Mighty Mouse (2.75-inch folding-fin aircraft rocket)
Military-civilian relationships
NOTS Advisory Board
Polaris

Project Paperclip
Propellants
Rolling Airframe Missile (RAM)
Rockets
Salt Wells pilot plant
Thompson, Dr. Louis T. E.
Weapon A 12-75-inch antisubmarine rocket

SMITLEY, CHARLES RAYMOND

Interviewer: Nelson Wood

Date of Interview: January 26, 1979

Documentation: Tapes, transcript

Abstract: Mr. Smitley describes his background and education, and his work with the Harvard Underwater Sound Laboratory.

Repositories: NUM

Institutions:

Harvard University
U.S. Army Signal Corps
Underwater Sound Laboratory

Other Entries:

Acoustics research
Electronics research
Ordnance research

SNYDER, RADM J. E., JR.

Interviewer: Unknown

Date of Interview: December 23, 1974

Documentation: 1 tape

Abstract: This interview is primarily concerned with the growth of Naval R&D in the 1960s. RADM Snyder initially describes the role of Dr. James H. Wakelin, Assistant Secretary of the Navy for R&D, in this growth. He discusses Dr. Wakelin's small staff and budget, the relations of the staff with the various Naval bureaus, the problems encountered in laboratory management, and the consequent attempt to strengthen the Assistant Secretary's role in managing the laboratories. He also provides information on the establishment of the position of the DNL and the Navy Oceanographer. The interview concludes with a discourse on the relations among the Chief of Naval Operations, the DNL, and the Oceanographer, as RADM Snyder links these relationships to the issue of horizontal and vertical management.

Repositories: DTRC

Individuals Mentioned:

Johnson, Lyndon B.

Kennedy, John F.

McNamara, Robert S.

Shaw, Milton

Wakelin, Dr. James H.

Institutions:

Navy bureaus

Office of the Chief of Naval Development

Office of the Chief of Naval Operations

Subjects:

Budget structure

Horizontal/vertical management

Laboratory management

Oceanographer of the Navy

Research and development

Unilinear/bilinear organization of
the Navy

Wakelin, Dr. James H.

SOLLENBERGER, PAUL

Interviewer: Steven J. Dick

Date of Interview: August 1987

Documentation: 3 tapes

Abstract: Mr. Sollenberger describes his years at the Naval Observatory, 1915 to 1954, including his years as Director of Time Service.

Repositories: USNO

Subjects:
Astronomy
Time Service

SOLOMON, DR. LOUIS

Interviewer: Dr. Joseph Marchese

Date of Interview: March 2, 1990

Documentation: 1 tape, 19 page transcript, index

Abstract: This interview is one in a series conducted to gather information on the disestablishment of NAVMAT and the establishment of SPAWAR. Dr. Solomon initially provides details of his professional background and describes his role with PM-4. He also outlines the histories of PM-4 and OP-095 and discusses the changes that occurred when his group went from PM-4 to OP-951 under RADM Daniel Wolkensdorfer. Dr. Solomon elaborates on an investment strategy study for OP-095 and on the difficulties that arose from his report. He provides information on the establishment of SPAWAR and on his perception of its functions. Dr. Solomon also gives details regarding the relationship between himself and VADM Clark. He gives his opinion of WSA&E and provides insight into the structure of SPAWAR 30 and the problems with the leadership over WSA&E specifically and in SPAWAR generally. Dr. Solomon confronts the question of morale in SPAWAR and assesses the placement of WSA&E in that command. He describes the differences between fleet operations and WSA&E and proposes his recommendations regarding that function. He concludes by summarizing his career since leaving SPAWAR.

Individuals Mentioned:

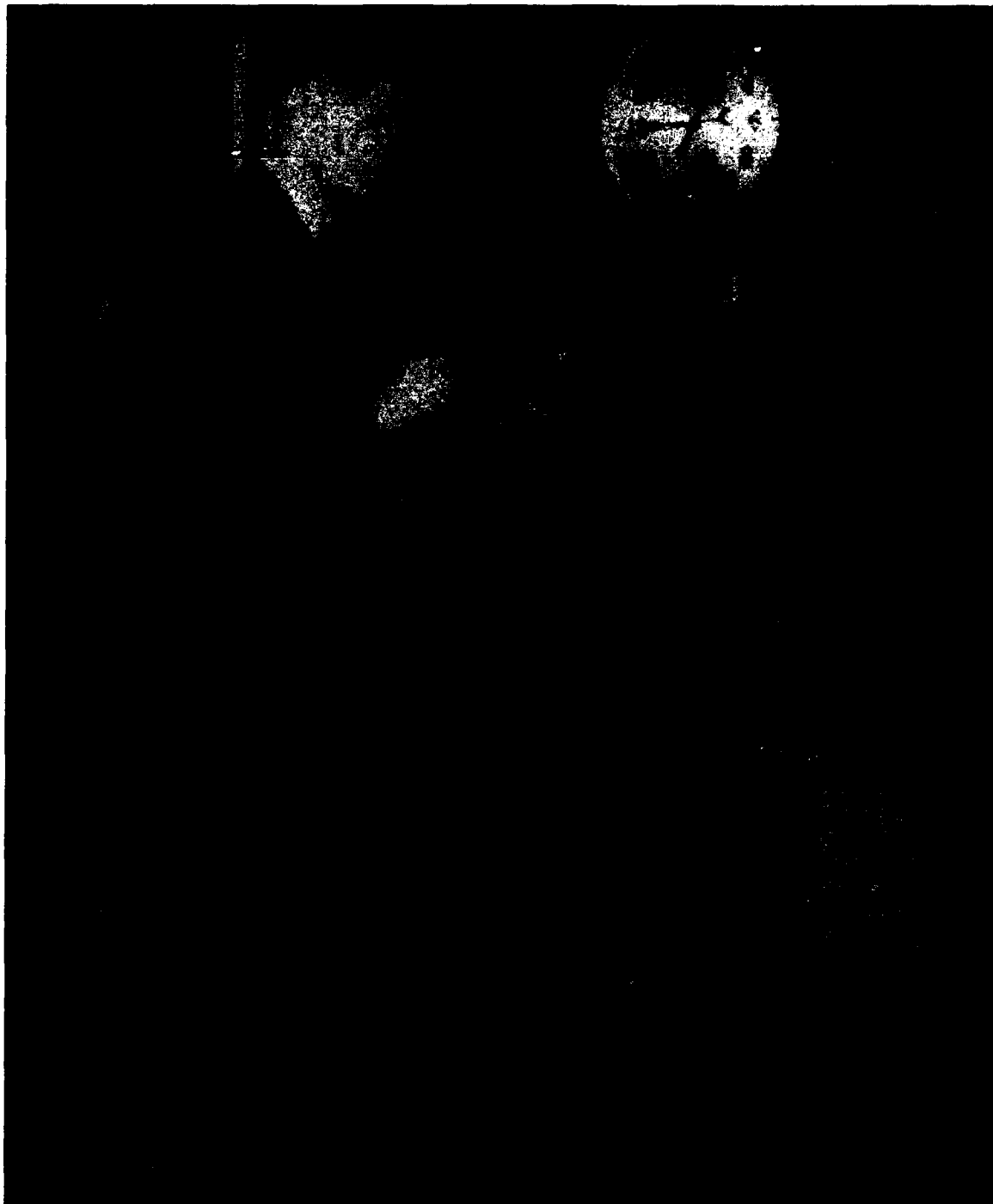
Baggett, VADM Lee
Batzler, RADM Jack
Brooks, RADM Dennis
Carlsen, RADM Kenneth
Clark, VADM Glenwood
Cox, CAPT Duane
Doak, Robert
Garrett, H. Lawrence, III
Hogg, ADM James

Langston, CDR Marvin
Lehman, John
Leuschner, RADM Robert
Martell, VADM Charles B.
Ray, CAPT Norman
Watkins, ADM James
White, ADM Steven
Wolkensdorfer, RADM Daniel

Institutions:

Center for Naval Analyses
CNO Executive Panel
National War College
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Sea Systems Command
Naval Underwater Systems Center

North Atlantic Treaty Organization
Office of the Chief of Naval Operations
Planning Systems, Inc.
Space and Naval Warfare Systems Command
Strategic Systems Project Office
Systems Planning Associates
War Resources Board



PAUL SOLLENBERGER
FIRST DIRECTOR OF UNITED STATES NAVAL OBSERVATORY TIME SERVICE,
SEEN HERE IN THE 1930s IN FRONT OF THE MASTER CLOCK

Subjects:

Antisubmarine warfare (ASW)
Disestablishment of NAVMAT
Establishment of SPAWAR
Research, development, test, and
evaluation (RDT&E)

Tentative operational requirements
Top-level warfare requirements
Warfare systems architecture and
engineering

SPANGENBURG, GEORGE

Interviewer: Booz, Allen & Hamilton

Date of Interview: February 10, 1975

Documentation: 1 tape

Abstract: Mr. Spangenburg was a member of the evaluation division of BUAER for many years. He describes his background and education, his time at the Naval Aircraft Factory before and during WWII, and his assignments at BUAER. Spangenburg comments on the way in which design, testing and contracts were handled by BUAER, and about how this compared with how BUSHIPS and BUORD carried out the same activities. The reorganization of BUAER in the 1950s and the introduction of operational requirements to the design process are discussed, as is the merger of BUAER and BUORD. Spangenburg also recounts his efforts to put out an instruction on how contract competitions should be conducted, something which had not yet been done at the time of the interview.

Repositories: DTRC

Institutions:

Bureau of Aeronautics
Bureau of Ordnance
Bureau of Ships

Naval Aircraft Factory
Office of the Chief of Naval Operations
Robertson Committee

Subjects:

Aircraft design
Aircraft evaluation
Bureau of Aeronautics

Contracting
Management of research and development
Missile development

STEARNS, MRS. J. V.

Interviewer: Albert B. Christman

Date of Interview: January 1967

Documentation: 24 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mrs. Stearns recalls RADM Parsons as a young boy growing up in New Mexico and gives portraits of other Parsons family members. She also describes her hometown reaction to the use of the atomic bomb.

Repositories: NWC, DTRC

Individuals Mentioned:

Fuller, Clarissa Parsons
Parsons, RADM William S.
Wilkerson, Kenneth

Subjects:

Parsons, RADM William S.

STEPHENSON, CAPT PAUL D.

Interviewer: Leroy L. Doig, III

Date of Interview: June 10, 1986

Documentation: Tapes, 36 page transcript

Abstract: CAPT Stephenson discusses his career, his tour at NWC, military-civilian relationships, and the RDT&E process. Specific topics include the HARM program and contracting problems, industry versus in-house development, and the Burrell Hays "firing" at the hands of Paisley. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Hays, Burrell W.
Paisley, Melvyn

Institutions:

Naval Air Systems Command
Naval Weapons Center
Test and Development Squadron 5 (VX-5)

Subjects:

Contracting	Research, development, test, and
In-house, out-of-house mix of work	evaluation (RDT&E)
Military-civilian relationships	

Other Entries:

High-Speed Antiradiation Missile (HARM)

STONE, DR. HARRIS B.

Interviewer: Booz-Allen & Hamilton

Date of Interview: November 28, 1974

Documentation: 1 tape, index

Abstract: This interview is part of Booz-Allen & Hamilton's review of Navy R&D Management 1943-1973. Dr. Stone discusses leaving the Army laboratory system to work for the Navy, feeling that the Navy had better military/civilian relations and more opportunities in in-house research. He

describes his work coordinating electronics warfare and intelligence research in ONR, and the reorganization that placed his group under the CNO. He emphasizes the need to analyze Navy R&D programs in totality.

Repositories: DTRC

Individuals Mentioned:

Burns, Dr. Robert O.
Zumwalt, ADM Elmo

Institutions:

Ft. Huachuca	Office of Naval Research
Ft. Monmouth	U.S. Army
Office of Chief of Naval Operations	
Office of Director of Research, Development, Test & Evaluation	

Other Entries:

Electronic warfare	Long range planning
Intelligence	Naval research

STONER, DONALD W.

Interviewer: Cynthia Rouse

Date of Interview: September 14, 1976

Documentation: 19 page transcript

Abstract: This interview is the Chapter IV of Dahlgren, edited by Kenneth G. McCollum. Mr. Stoner describes the work he did on bombsights and fuzes at Dahlgren between 1935 and 1941, experiments with armor-piercing bombs, general ordnance work during World War II, funding problems, change in emphasis to guided missiles, re-working World War II ammunition during the Vietnam War, problems with the local community, accidental deaths during ordnance tests, and co-workers.

Repositories: NSWC

Individuals Mentioned:

Dement, Roger	Reynolds, Dr. Melvin F.
Kemper, Dr. William	Tubman, Benjamin

Institutions:

Bureau of Ordnance
Naval Proving Ground
Naval Weapons Laboratory

Subjects:

Armor piercing bombs	Fuzes
Ballistics	Ordnance
Bombs	Projectiles
Bombsights	

STRAND, DR. KAI A.

Interviewer: Dr. David H. DeVorkin

Date of Interview: December 8, 1982 and January 3, 1983

Documentation: Tapes, 140 page transcript

Abstract: Mr. Strand's early life and training in Copenhagen, his work for the US Army during World War II, and his time at the Sproul, Yerkes, and US Naval Observatories are discussed.

Repositories: NASM

Institutions:

Naval Observatory
Northwestern University
Sproul Observatory

U.S. Army
Yerkes Observatory

Subjects:

Astronomy

STRANG, MINCHEN

Interviewer: Elizabeth Babcock

Date of Interview: May 24, 1988

Documentation: 75 page transcript, index

Abstract: Mrs. Strang provides a breezy, informal overview of the personalities and public affairs issues of NWC from the perspective of a former editor of *The Rocketeer*, NWC's in-house newspaper. She offers an insider's perspective on the "great burro shoot," a delicate public-relations issue for NWC in the 1970s. She also discusses colorful characters who worked on some of the Center's important technical projects and philosophizes on changes in the work and social environment over the years of her employment on the Center and her residence in the community of China Lake. Other topics include military-civilian relationships, the Center's white blood cell count study, disaster preparedness, and NOTSNIK (the earth satellite project of the Naval Ordnance Test Station).

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Amlie, Dr. Thomas S.
Burt, CAPT John A.
Dickerson, CAPT Kenneth A.
Freeman, RADM Rowland G., III
Haff, CAPT William B.
Harris, RADM William L.
Hays, Burrell W.

Hillyer, Robert
Hollingsworth, Dr. Guilford L.
Lahr, CAPT John Jude
Rogers, Dr. Marguerite M.
Schiefer, Gerald
Sewell, Robert G.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Other Entries:

China Lake community
Commanders
Disaster preparedness
Military-civilian relationships
Naval Ordnance Test Station Satellite
(NOTSNIK)

Public relations
Public release of information
Technical Directors
White blood cell count study

STRAUSS, RADM LOUIS L.

Interviewer: Albert B. Christman

Date of Interview: May 1967

Documentation: 13 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. RADM Strauss recalls his first acquaintance with Parsons, in the Manhattan Project, and Parsons' feelings on the United States' atomic strategy. He details Parsons' relationship with SECNAV James Forrestal, his and Parsons' roles on the Atomic Energy Commission, and Dr. Robert Oppenheimer's loss of clearance.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Forrestal, James
Oppenheimer, Dr. Robert
Parsons, RADM William S.

Institutions:

Atomic Energy Commission
Naval Proving Ground

Other Entries:

Manhattan Project
Oppenheimer, Dr. Robert
Parsons, RADM William S.

STUMP, ADM FELIX BUDWELL

Interviewer: Unknown

Date of Interview: 1965

Documentation: 364 page transcript

Abstract: This interview concerns the Naval Academy, naval aviation training at Pensacola in 1919, aeronautical engineering 1922-1924, and the Naval Air Maintenance Procurement Division, Bureau of Aeronautics.

Repositories: COL, NHC

Institutions:

Bureau of Aeronautics

Subjects:

Naval Air Maintenance Procurement
Division, Bureau of Aeronautics
Naval aviation

Other Entries:

Aeronautical engineering

SULLIVAN, SHELBY

Interviewer: Elizabeth Babcock

Date of Interview: January 25, 1989

Documentation: 53 page transcript, index

Abstract: Mr. Sullivan discusses the personalities and programs of the Pasadena Annex of the Naval Ordnance Test Station (NOTS), where he worked from his college graduation in 1956 through Pasadena's 1967 reorganization into the Naval Undersea Research and Development Center, predecessor organization of the Naval Ocean Systems Center, where Sullivan is now employed. As a young employee of Pasadena Annex, Sullivan found his creativity sparked through his working relationship with Dr. William B. McLean, who, as NOTS Technical Director, would frequently visit the Pasadena Annex. Sullivan describes his work in troubleshooting the Librascope-developed MK 5 fire-control computer and redesigning the Librascope Mark 111 fire-control computer. He also recalls his involvement in a wide variety of other programs including RETORC, the predecessor of many NOTS torpedo developments; the Mark 44 torpedo; and antisubmarine rocket (ASROC) developments, including command ASROC trajectory (CAT), wet ASROC missile (WAM), and ASROC itself. Sullivan sees the management style of Doug Wilcox (as well as of that Dr. McLean) as having been key to the morale and productivity of NOTS Pasadena and remembers positively the working relationships between Pasadena and China Lake.

Repositories: NWC (parts of the interview may be classified)

Individuals Mentioned:

Hicks, Walter E.
Kunz, D. A.
Lang, Thomas G.

McLean, Dr. William B.
Stroop, VADM Paul D.
Wilcox, Douglas J.

Institutions:

Bureau of Ordnance
Bureau of Ships
Naval Ocean Systems Center
Naval Ordnance Test Station

Naval Undersea Research and Development
Center
Naval Weapons Center

Other Entries:

Antisubmarine rocket (ASROC)
Fire control systems
McLean, Dr. William B.
Research torpedo configuration

Torpedoes
Underwater acoustics
Wilcox, Douglas J.

SULLIVAN, ADM WILLIAM

Interviewer: Unknown

Date of Interview: 1965

Documentation: 1,784 page transcript

Abstract: ADM Sullivan recalls his career in the Navy, with special mention of Naval construction, Navy yards in United States, the Trans-Siberian Railroad, his work at the Model Basin and Washington Naval Gun Factory, diving technology and mine-sweeping.

Repositories: COL, NHC

Institutions:

Experimental Model Basin
Naval Gun Factory

Subjects:

Diving technology
Mine warfare

Naval construction
Trans-Siberian Railroad

SYKES, RADM JAMES B.

Interviewer: Albert B. Christman

Date of Interview: April 27, 1967

Documentation: Notes, index

Abstract: RADM Sykes discusses his tenure as Commanding Officer at NOTS--his operating philosophy for the station, his relationship with scientists there, and the building of a neighborhood community. He recalls how he got his appointment to the Naval Academy and compares his other tours of duty with his time at NOTS.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Sykes, Mrs. James

Institutions:

Naval Ordnance Test Station
Salt Wells Pilot Plant

Subjects:
Naval Ordnance Test Station

TALKINGTON, HOWARD R.

Interviewer: Dr. Mark Jacobsen

Date of Interview: November 1987

Documentation: 1 tape, 19 page transcript

Abstract: Howard Talkington discusses the role of NOTS Pasadena in the Polaris underwater launch system including preparation of the launch site, installation of equipment, and testing the Polaris at San Clemente Island.

Repositories: NOSC

Individuals Mentioned:

Blatt, Milt	Kunz, Brad
Heller, Dick	Taber, Joe
Juhasz, Andy	Vetter, Joe

Institutions:

Lockheed
Westinghouse

Subjects:

Missile testing
Polaris underwater launch system

Other Entries:

Cable-controlled Underwater Recovery	Sealab II
Vehicle (CURV)	Submarine Rocket (SUBROC)
San Clemente Island	TRIDENT program

THOMPSON, ARTHUR

Interviewer: Richard D. Glasow

Date of Interview: August 22, 1980

Documentation: Tapes, transcript

Abstract: Mr. Thompson speaks of his work with the Ordnance Research Laboratory.

Repositories: NUM

Institutions:

Ordnance Research Laboratory/Pennsylvania State University

Other Entries:
Acoustics research

THOMPSON, DR. LOUIS T. E.

Interviewer: Albert B. Christman

Date of Interview: November 6, 7, 1965

Documentation: 54 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Thompson discusses Parsons' background, his early days at the Naval Proving Ground at Dahlgren, VA, and Parsons at NRL and NOTS. Thompson also includes an account of Parsons' work on the Manhattan Project, his thoughts on in-house labs, and his role in the Naval hierarchy.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Duncan, CAPT James
Hussey, VADM George F.

Lauritsen, Dr. Charles C.
Moulton, Dr. Forrest R.
Parsons, RADM William S.

Institutions:

Bureau of Ordnance
Naval Ordnance Test Station
Naval Proving Ground

Naval Research Laboratory
Naval Surface Weapons Center

Subjects:

Manhattan Project
Parsons, RADM William S.

THOMPSON, DR. LOUIS T. E.

Interviewer: Albert B. Christman

Date of Interview: May 1966

Documentation: 52 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Christman and Thompson discuss the philosophy of NOTS as a permanent R&D Center. They describe how the station got its name and the first projects performed there. Also included are sections on top management problems at NOTS and RADM Parsons' work there.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Burroughs, RADM Sherman E.
Duncan, CAPT James
Hayward, ADM John T.
Hussey, VADM George F.

Parsons, RADM William S.
Schoeffel, RADM Malcom F.
Schuyler, CAPT Michael
Sykes, RADM James B.

Institutions:

Bureau of Ordnance
Naval Ordnance Test Station

Subjects:

Management
Naval Ordnance Test Station
Parsons, RADM William S.
Rockets

Other Entries:

Engineering Duty Officers
Sidewinder Missile Project

THOMPSON, DR. LOUIS T. E.

Interviewer: Albert B. Christman

Date of Interview: November 5, 1966

Documentation: 68 page transcript, index

Abstract: The first portion of this interview is concerned with the identification of further sources for a work about RADM William S. Parsons. Dr. Thompson then discusses the founding of NOTS and how it became an R&D center. He talks about contributors to the founding of NOTS and to the early definition of its mission, as well as the evolution of the center following the war and the evolving concept of mission. He closes with a discussion of the value of simulation and the need for operations officers in the R&D process.

Repositories: DTRC

Individuals Mentioned:

Blandy, ADM George
Burroughs, RADM Sherman E.
Hussey, VADM George F.

Parsons, RADM William S.
Schoeffel, RADM Malcom F.

Institutions:

Bureau of Ordnance
California Institute of Technology

Naval Ordnance Testing Center
Naval Research Laboratory

Subjects:

Naval Ordnance Test Station
Ordnance
Parsons, RADM William S.

Other Entries:

Antisubmarine warfare (ASW)
Operation Crossroads

Sidewinder missile
Special Projects Office

THOMPSON, DR. LOUIS T. E.

Interviewer: A. B. Christman

Date of Interview: November 1967

Documentation: 100 page transcript, index

Abstract: This interview was conducted to provide background for a history of NOTS, and Dr. Thompson begins by discussing the founding of the Armor Piercing Laboratory at Dahlgren. He then moves into a discussion of his career up to the conclusion of World War II. The remainder of the interview is devoted to a discussion of the proposed book and Dr. Thompson's suggestions for further inquiries.

Repositories: DTRC

Individuals Mentioned:

Goddard, Dr. Robert
Hickman, Dr. Roy Scott
Lauritsen, Dr. Charles C.

Moulton, Dr. Forrest R.
Parsons, RADM William S.
Tolman, Dr. Richard C.

Institutions:

Clark University
Naval Ordnance Testing Center
Naval Research Laboratory

Subjects:

Naval Ordnance Test Station
Radar
Rockets

Other Entries:

Armor piercing bombs
Jet Propulsion

THOMPSON, DR. LOUIS T. E.

Interviewer: Albert B. Christman

Date of Interview: November 10, 1968

Documentation: 40 page transcript

Abstract: Dr. Thompson comments informally on pre-World War II research at the Naval Proving Ground, weapons design, and the Naval bureaucracy.

Repositories: NWC

Individuals Mentioned:

Goddard, Dr. Robert
Hedrick, CAPT David
Schuyler, CAPT Michael

Institutions:

Naval Proving Ground

Subjects:

Naval bureaucracy
Naval Proving Ground
Weapons design

THOMPSON, DR. LOUIS T. E.

Interviewer: Cynthia Rouse

Date of Interview: December 8, 1976

Documentation: 8 page transcript

Abstract: This interview is Chapter II of Dahlgren, edited by Kenneth McCollum. Dr. Thompson explains his decision to come to Dahlgren in 1923, comments on his personal goals, the environment at the Proving Ground, support from BUORD, his friendship with RADM Parsons, and his theories on the value of experimental and developmental work.

Repositories: NSWC

Individuals Mentioned:

Parsons, RADM William S.
Stark, ADM Harold R.

Institutions:

Bureau of Ordnance
Naval Proving Ground

Subjects:

Naval Proving Ground
Parsons, RADM William S.

TIBBITTS, CAPT BARRICK F.

Interviewer: Dr. David K. Allison

Date of Interview: July 16, 1984

Documentation: 3 tapes, index

Abstract: At the end of his tour at DTNSRDC, CAPT Tibbitts reviews his three years at the Center and his major accomplishments. He describes the Center's role in relation to other NAVMAT laboratories and its customers, the Systems Commands.



DR. LOUIS T. E. THOMPSON (LEFT)
AND ADMIRAL WILLIAM S. PARSONS (THEN COMMANDER),
EXPERIMENTAL OFFICER OF THE NAVAL PROVING GROUND

Repositories: DTRC

Individuals Mentioned:

Powell, Dr. Alan
Ricketts, COMO Myron V.

Institutions:

David Taylor Naval Ship Research and Development Center
Naval Sea Systems Command

Other Entries:

Engineering Duty Officers	Military construction
Laboratory management	Navy Industrial Fund
Long range planning	Ship design

TINO, JOHN

Interviewer: Dr. Joseph Marchese

Date of Interview: July 21, 1989

Documentation: 2 tapes

Abstract: This interview is one of a series conducted to gather material for a history of the development of the MK 48 Torpedo. Mr. Tino discusses his career and background at the Naval Ordnance Laboratory, White Oak, and particularly his involvement with torpedo development. Tino talks about the use of systems analysis in the MK 48 program, the influence of ASW tactics on technology and vice versa, and the development of the MK 48 from the NOL perspective, to include the Clevite/Westinghouse competition, the controversy over the number of Navy R&D centers involved with torpedoes, fleet introduction/reliability testing, the removal of the MK 48 from NSWC to NUSC, and the later improvements to the MK 48 in the AHIP and ADCAP programs. Tino also reflects on the relations between OPNAV and the R&D centers, the relations between the centers, and provides the names of many other individuals involved in the program.

Repositories: DTRC

Institutions:

Applied Research Laboratory/Pennsylvania State University	Naval Undersea Systems Center
Clevite Corporation	Office of the Chief of Naval Operations
Keyport Torpedo Station	Submarine Development Group II
Naval Ocean Systems Center	Westinghouse Electric Company
Naval Ordnance Laboratory/Naval Surface Warfare Center	

Subjects:

Advanced Capability (ADCAP) Torpedo	Program management
Advanced Homing Improvement Program	Systems analysis
Fixed-cost contracting	Torpedo development

TOPPING, RADM ROBERT

Interviewer: Dr. Joseph Marchese

Date of Interview: March 19, 1990

Documentation: 2 tapes, 45 page transcript, index

Abstract: This interview is one in a series conducted to gather information about the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Topping begins the interview with a discussion of the early days of SPAWAR and the establishment of the WSA&E function in SPAWAR. He elaborates on the connectivity between space and undersea platforms as well as on the two parts of architecture and connectivity. RADM Topping evaluates the effect of the next generation computer resource (NGCR) program on coordinating competing hardware and describes the standards and roles of computer systems in interconnectability and how contract development of new computers is incorporating the above standards. He addresses improvements in operating interface systems and examines the move by our European allies to join in information sharing endeavors. RADM Topping describes the results of a DSB briefing on computers and details the effects of standards development in the R&D centers. He discusses the improvements being made in civilian requirements for "ruggedization" as well as work being done in multilevel security of systems. RADM Topping expounds on the incorporation of C3I in the above standards and the effect of NGCR on the Navy. He details the efforts of SPAWAR 32 regarding NGCR and elaborates on its flexibility. RADM Topping addresses the broad support for NGCR and also describes the impact and controversy surrounding the NRAC in connection with the NGCR program. RADM Topping discusses the role of WSA&E in extended performance, testing and interface and the role and mission of the Program Executive Officer (PEO) in WSA&E. He elaborates on the needs of SPAWAR 32 and the problems that activity encountered in acquiring manpower and funding for WSA&E. RADM Topping assesses SPAWAR's effectiveness with WSA&E over other systems commands and provides a historical background of the emergence of the WSA&E function. He describes the three elements of WSE and evaluates the effectiveness of SPAWAR 32 with WSE and also evaluates SPAWAR's overall efforts in interfacing. RADM Topping addresses the perception of SPAWAR's lack of exertion to enforce its authority in architecture and engineering and discusses the development of a force pervasive discipline. RADM Topping concludes by comparing the differences between architecture and engineering.

Repositories: DTRC

Individuals Mentioned:

Batzler, RADM Jack

Cann, Gerald

Cheney, Richard

Clark, VADM Glenwood

Lehman, John

Paisley, Melvyn

Perry, Dr. William

Rowden, VADM William

Walker, John

Weaver, RADM John

Wilkinson, VADM Joseph, Jr.

Institutions:

American Telephone and Telegraph Co.
Defense Advance Research Project Agency
Defense Science Board
Department of Defense
General Electric Corp.
IBM Corporation
Litton Corporation
Massachusetts Institute of Technology/
Artificial Intelligence Laboratory
Naval Air Development Center
Naval Air Systems Command

Naval Electronic Systems Command
Naval Material Command
Naval Research Advisory Committee
Naval Sea Systems Command
Naval Surface Warfare Center
Naval Weapons Center
Office of the Chief of Naval Operations
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command
Strategic Systems Project Office

Subjects:

AEGIS program
Backplane
Central processing unit
Command control, communication, and
intelligence
Communication Support System
Disestablishment of NAVMAT
Distributed performance, testing, and
interface
Establishment of SPAWAR
Fiber optics interface
Force-pervasive system
Integrated circuits
Joint electromagnetic interface
Mapping, charting, and geodesy
MK 48 torpedo
Next generation computer resource
program
Ocean Surveillance Information System

Program Executive Officer
Relocatable Over-the-Horizon Radar
Research, development, and acquisition
Senior Executive Service
Standard Embedded Computer Resource
program
Systems engineering
TOMAHAWK cruise missile program
Very-high speed integrated circuit
Warfare systems architecture and
engineering
Warfare systems controlled interface
document
Warfare systems engineering
Warfare systems performance
specifications
Warfare systems test specifications

TOUSEY, DR. RICHARD**Interviewer:** Dr. David H. DeVorkin**Date of Interview:** November 1981, January 8, and April 6, 1982**Documentation:** Tapes, 160 page transcript

Abstract: Dr. Tousey talks about his education, interest in the UV solar spectrum, contact with E. O. Hulburt, and research in optics at the Naval Research Laboratory during World War II. After the war, Hulburt brought Tousey into the V-2 rocket program, and he designed a new UV spectrograph. He describes his involvement with and objectives of the V-2 program, and designs of Aerobee and Viking spectroscopic equipment.

Repositories: NASM**Individuals Mentioned:**

Friedman, Dr. Herbert
Goldberg, Dr. Leo
Hulburt, Dr. Edward O.
Krause, Dr. Ernst H.

Menzel, Dr. Donald
Roberts, Dr. Walter Orr
Van Allen, Dr. James

Institutions:

Applied Physics Laboratory
Bureau of Aeronautics
Harvard University

Naval Research Laboratory
Upper Air Rocket Research Panel

Subjects:

Experimental physics
Optics
Satellites

Solar physics
Solar X-ray radiation
X-ray astronomy

Other Entries:

Aerobee Rocket
Coronagraphic studies
Infrared sensors
Lyman-Alpha
Nike missile

Photoelectric sensors
Ultraviolet solar spectroscopy
V-2 Rocket
Viking rocket

TOWLE, CAPT BERNARD

Interviewer: Dr. Samuel Rothman, Dr. Peter Bruton, and
Mrs. Susan Frutkin

Date of Interview: December 17, 1974

Documentation: 3 tapes, 54 page transcript, index

Abstract: CAPT Towle discusses lab management under SECDEF Robert S. McNamara, the philosophies of different Navy bureaus, and the combination of the Bureau of Ordnance and Bureau of Aeronautics. He talks about the establishment of the DNL, particularly why the labs should report to CNM. Towle explains the influence of outside sources on R&D, including the Sherwin Plan, the Mansfield Amendment, the National Science Foundation, and congressional input. He also comments on problems in the use of labs, in decision making, and trends in top-level laboratory management.

Repositories: DTRC

Individuals Mentioned:

Johnson, Dr. Gerald
McNamara, Robert S.
Sherwin, Dr. Chalmers

Institutions:

Bureau of Aeronautics
Bureau of Ordnance
National Science Foundation

Office of Chief of Naval Material
Office of Director of Navy Laboratories

Other Entries:

Director of Navy Laboratories
Laboratory management

Mansfield Amendment
Sherwin Plan

TOWLE, CAPT BERNARD

Interviewer: Albert B. Christman

Date of Interview: March 14, 1978

Documentation: 1 tape, 32 page transcript

Abstract: CAPT Towle comments on his positions in the Navy in the 1960's, the pre-DNL lab management, and the introduction of the Sherwin Plan. He explains the Navy's compromise plan for reorganization of the labs--changes dictated by technology, SYSCOM resistance, and ADM Rivero's decision that military command of the labs is not essential. Towle talks about the DNL charter, concepts of the DNL position, and the first DNL. He describes the problems in selecting lab managers, SECDEF McNamara and the DNL, and DDR&E's influence. Towle discusses the Navy's loss of flexibility in controlling money and the effects of SYSCOM opposition to the establishment of the DNL. He comments on the second DNL, ADM Kidd's view of the labs, and the future of the lab system.

Repositories: NWC, DTRC

Individuals Mentioned:

Andrews, CAPT Albert

Kidd, ADM Issac C., Jr.

McNamara, Robert S.

Rivero, ADM Horacio

Rothman, Dr. Samuel

Smith, Dr. Howard C.

Institutions:

Naval Material Command

Office of Assistant Secretary of the
Navy (R&D)

Office of Director of Defense Research
and Engineering

Office of Director of Navy Laboratories
Systems commands

Subjects:

Director of Defense Research and
Engineering

Director of Navy Laboratories

Laboratory organization
Sherwin Plan

TREMBLAY, HAROLD

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 6, 1982

Documentation: 1 tape

Abstract: Mr. Tremblay describes his personal background and his early NAMU work, including the V-2 Missile Studies, glider research, and early television projects, leading to airborne video cameras. He discusses Project Typhoon, his relations with RCA, and BUAER's role at NADC. Tremblay talks about Typhoon's construction as a vacuum tube computer, its applications, and its size.

Repositories: NADC, DTRC

Institutions:

Bureau of Aeronautics
Naval Air Development Center
Naval Air Modification Unit

Princeton University
Radio Corporation of America

Subjects:

Computer simulation
Guided missile computers
Missile systems

Other Entries:

Computer research
Hurricane Project
Research Calculator (REAC) computers

Typhoon Project
V-2 Rocket
Whirlwind Project

TREMBLAY, HAROLD

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 20, 1982

Documentation: 1 tape

Abstract: Mr. Tremblay discusses the relationship between NADC and the University of Pennsylvania, the creation of the Numerical Analysis Branch at NADC in 1953, and the reorganization of computer work there in 1955 and 1956. He talks about the ambiguity in the term "systems concept," establishment of the Aeronautical Computer Lab at NADC, and connections between computers and centrifuges. Tremblay describes computer work in the 1960's and the development of advanced software in the 1970's.

Repositories: NADC, DTRC

Individuals Mentioned:

Hardy, Dr. James D.

Institutions:

Aeronautical Computer Laboratory
Naval Air Development Center
Naval Proving Ground

U.S. Army
University of Pennsylvania

Subjects:

Aerospace medicine
Ballistic trajectories
Computer simulation

Computer software
Fire control computers
Space simulation

Other Entries:

Electronic Numerical Integrator and
Computer (ENIAC)
Gemini Project

Human centrifuge
Mercury Project
X-15 Project

TREXLER, JAMES HUGH

Interviewer: Dr. David K. Allison

Date of Interview: October 20, 1980

Documentation: 5 tapes, background, list of questions

Abstract: Mr. Trexler talks about radio telescope projects done at Stump Neck, MD, and Sugar Grove, WV, and research in electronic counter-measures at NRL. The interview is supplemented by a collection of papers on research management.

Repositories: NRL

Institutions:
Naval Research Laboratory

Subjects:
Computer simulation
Guided missile computers
Missile systems

Other Entries:
Computer research
Hurricane Project
Research Calculator (REAC) computers

Typhoon Project
V-2 Rocket
Whirlwind Project

TRUAX, CAPT ROBERT

Interviewer: Albert B. Christman

Date of Interview: March 16, 1972

Documentation: 27 page transcript, index

Abstract: CAPT Truax talks about his own research at the Naval Academy and his early contacts in Maryland. He describes his work in California during World War II, the competition between himself and Dr. Robert Goddard, and the similarities and differences in their work. Truax comments on Goddard's general disposition, his penchant for secrecy, his poor health, and his research methods.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:
Fischer, LTC Frank
Goddard, Dr. Robert

Institutions:
U.S. Naval Academy

Subjects:

Goddard, Dr. Robert
Rocket research

TUNSTALL, DR. EDWARD

Interviewer: Dr. Joseph Marchese

Date of Interview: July 3, 1989

Documentation: 1 tape

Abstract: Tunstall discusses his assignment as Director of Navy Laboratories, the changes in SPAWAR that followed his assignment, the role of Navy R&D Centers, their strengths and weaknesses, the budgetary influence of SPAWAR on the R&D Centers, several recent studies of the Navy's R&D effort, the Centers' involvement with Fleet activities and Fleet support, and with the Strategic Defense Initiative. The issue of defense contract corruption is raised with Dr. Tunstall, and the effects of Navy Audit Service and FBI investigations on SPAWAR. Finally, Tunstall was asked to reflect on the ideal arrangement for R&D within the Navy.

Repositories: DTRC

Institutions:

Director of Navy Laboratories
Naval Material Command
Navy Audit Service
Navy laboratories

Navy research and development centers
Office of Naval Research
Office of Naval Technology
Space and Naval Warfare Systems Command

Subjects:

Amphibious warfare
Asset Capitalization Program
Corporate planning
Fitness reports
Fleet operational problems
Mine warfare
Navy Industrial Fund

Review processes
Roles and mission statements
"Smart buyer"
Strategic Defense Initiative
Technology base funding
Warfare systems architecture and engineering

TUVE, DR. MERLE

Interviewer: A. B. Christman

Date of Interview: May 1967

Documentation: 41 page transcript

Abstract: Dr. Tuve discusses his reasons for joining NDRC and the difficulties involved in getting the program started. He talks at length about his work on the proximity fuze program; at various times he refers to both the scientific and administrative aspects of it, as well as RADM Parsons' contributions. He also discusses his own work in early radar, as well as that of RADM Parsons. He briefly discusses his role in the Manhattan Project and concludes by mentioning the guilt often felt by the creators of weapons.

Repositories: DTRC

Individuals Mentioned:

Bush, Dr. Vannevar
Groves, LTG Leslie

Parsons, RADM William S.
Roberts, Dr. Richard

Institutions:

Bolling AFB
Carnegie Institute
Naval Research Laboratory

Subjects:

Atomic weapons
Parsons, RADM William S.
Radar

Other Entries:

Manhattan Project
Proximity fuzes

Pulse radio
Uranium committee

TUVE, DR. MERLE

Interviewer: Albert B. Christman

Date of Interview: May 1976

Documentation: 41 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Dr. Tuve talks about his own work on the Influence Fuze, his first contact with Parsons, and security in Naval labs. He discusses Parsons' work on the fuze programs, producing fuzes, and tube research. Tuve comments on American radar research, the Proximity Fuze, and the Manhattan Project.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Bush, Dr. Vannevar
Parsons, RADM William S.
Roberts, Dr. Richard

Institutions:

Naval Proving Ground
Naval Research Laboratory
Office of Scientific Research and Development

Subjects:

Influence fuze project
Manhattan Project
Parsons, RADM William S.

Proximity fuze
Radar research

TYLER, COL JOHN

Interviewer: Leroy L. Doig, III and Frances C. Matthews

Date of Interview: June 17, 1985

Documentation: 72 page transcript, index

Abstract: COL Tyler discusses the role of the Technical Officer at China Lake and the Center's relations with Headquarters and with the Marine Corps and Marine Corps projects. He discusses NWC projects he has been associated with, including Cheap Night, RPVs, Samson decoy, Skipper, ACIMD, and avionics software. The Colonel also discusses elements of the China Lake philosophy and the military-civilian interactions that are essential to the Center's success. ACCESS LIMITED

Repositories: NWC

Individuals Mentioned:

Burns, CAPT J. D.

Porter, William B.

Hays, Burrell W.

Schiefer, Gerald

Institutions:

Naval Weapons Center

Other Entries:

Advanced Common Intercept Missile

Military-civilian relationships

Demonstration

Remotely piloted vehicles

Avionics

Vietnam war, laboratory support

UPGREN, A.

Interviewer: David H. DeVorkin

Date of Interview: 1977

Documentation: Tapes

Repositories: AIP

Subjects:

Astronomy

VAN ALLEN, DR. JAMES

Interviewer: Dr. David H. DeVorkin and Allan Needell

Date of Interview: January 16, February 18, June 18, 22,
July 12, 15, 28, and August 6, 1981

Documentation: Tapes, 362 page transcript

Abstract: Dr. Van Allen talks about his family and life in Iowa during World War I, his educational background, thesis subjects, and post-graduation job at the Department of Terrestrial Magnetism in Washington and interest in cosmic ray studies. He describes his work in World War II in the Pacific, Merle Tuve and the development of the Proximity Fuze, post-war years at the APL, work with NRL on the V-2 rockets, and achievements of the V-2 experiments, the development of the Rockoon, the Rocket Panels' involvement during the International Geophysical Year, the effect of Sputnik and the rush to launch Vanguard, the establishment of NASA, satellites, the "Van Allen" radiation belts, and the outlook for space science.

Repositories: NASM

Individuals Mentioned:

Braun, Wernher von	Toftoy, BG Holger N.
Johnson, Lyndon B.	Tousey, Dr. Richard
Krause, Dr. Ernst H.	Tuve, Dr. Merle
Millikan, Dr. Robert A.	Zwicky, Fritz

Institutions:

Applied Physics Laboratory	International Geophysical Year
Bureau of Ordnance	Naval Research Laboratory

Subjects:

Cosmic rays	Satellites
Magnetospherics	Tuve, Dr. Merle
Physics	

Other Entries:

Aerobee Rocket	Sputnik
Explorer Program	USS NORTON SOUND
Project Sherwood	V-2 Rocket
Proximity fuze	Van Allen Radiation Belt
Rockoon	Vanguard Program

VAN ORDEN, RADM MERTON

Interviewer: Dr. Joseph Marchese

Date of Interview: May 22, 1990

Documentation: 1 tape, 31 page transcript, index

Abstract: This interview is one in a series conducted to gather information about the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Van Orden discusses reasons for the establishment of NAVELEX, stressing especially the growing recognition in the Navy of the increasing importance of electronics. He then states that, at the time, the separation of various specialities was considered appropriate. According to RADM Van Orden, the establishment of NAVELEX was part of the Navy's effort to deal effectively with shore electronics. He then explains that RADM Raymond Schneider hoped to integrate the entire communications systems of the Navy, and offers an assessment of the effectiveness of that attempt. A description of RADM Van Orden's work in NAVELEX as Program Manager, Electronics follows. RADM Van Orden also describes his views on the debate over horizontal versus vertical management within systems commands, before explaining the mechanics of funding

during his tenure at NAVELEX. He then presents an overall assessment of the effectiveness of NAVELEX before discoursing on the technical expertise of current systems commands' employees.

Repositories: DTRC

Individuals Mentioned:

Clark, VADM Glenwood
Doak, Robert
Rice, RADM Joseph

Schneider, RADM Raymond
Weaver, RADM John

Institutions:

Bureau of Aeronautics
Bureau of Ordnance
Bureau of Ships
Bureau of Weapons
Defense Communications Agency
Department of Defense
Electronics Project Office

Naval Air Systems Command
Naval Electronics Laboratory Center
Naval Ocean Systems Center
Naval Shore Electronics Engineering
Center
Space and Naval Warfare Systems Command

Subjects:

Budgets
Communications
Deterioration of technical expertise
within systems commands
Disestablishment of NAVMAT

Establishment of NAVELEX
Establishment of SPAWAR
Management of systems commands
Systems integration

VOSSLER, RADM CURTIS F.

Interviewer: J. D. Gerrard-Gough

Date of Interview: April 1973

Documentation: 34 page transcript, index

Abstract: RADM Vossler explains how he came to be in the Navy and talks about his early career. He describes testing rockets and new planes at NOTS and comments on the command structure at NOTS--in particular, the censures of CAPT John T. Hayward and CAPT James Sykes as Commanding Officers.

Repositories: NWC, DTRC

Individuals Mentioned:

Armitage, LT John M.
Burroughs, RADM Sherman E.
Hayward, ADM John T.

Pollock, CAPT Thomas
Sykes, RADM James B.

Institutions:

Naval Ordnance Test Station

Subjects:

Aircraft testing
Hayward, ADM John T.

Rocket testing
Sykes, RADM James B.

WAKELIN, DR. JAMES H.

Interviewer: Dr. Peter Bruton, Mrs. Susan Frutkin, and
CAPT Robert L. Hansen

Date of Interview: September 1974

Documentation: 2 tapes, 110 page transcript, index

Abstract: Dr. Wakelin discusses R&D programs in the 1950's, establishment of the ASN (R&D), the Polaris Program, and DDR&E as a pressure mechanism for ASN (R&D). He discusses the ONR-Blue Suit Navy relationship, management responsibilities for DDR&E appropriations, and the need for a coherent R&D program. Wakelin describes the Navy R&D planning system and program structure. He also mentions ideas for improving lab operations, the creation of the DNL, and the ASN (R&D) as a liaison between the Navy and DOD, and the difficulty of attracting qualified technical people.

Repositories: DTRC

Individuals Mentioned:

Franke, William B.
Hayward, ADM John T.
McNamara, Robert S.

Institutions:

Bureau of Ordnance
Department of Defense
Office of Assistant Secretary of the
Navy (R&D)

Office of Director of Defense
Research and Engineering

Subjects:

Assistant Secretary of the Navy (R&D)
Director of Defense Research and
Engineering

Director of Navy Laboratories
Research and development

Other Entries:

Polaris missile
Tentative specific organizational requirement

WALLER, VADM EDWARD

Interviewer: Dr. Joseph Marchese

Date of Interview: March 21, 1990

Documentation: 1 tape, 17 page transcript, index

Abstract: This interview is one in a series conducted to gather information about the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Waller begins by discussing how he served simultaneously as the head of NAVMAT's ASW Systems Program Office, PM-4, and as Director of the ASW Division, OP-951, of OCNR. Furthermore, he details how PM-4 controlled funding for ASW projects and how PM-4 was improved organizationally. ADM Waller also elaborates on the effectiveness of PM-4 and provides insight into the reasons why it was weakened. ADM Waller discusses the background of the

Naval Electronic Systems Command's Undersea Surveillance Systems Project Office, PME-124, and the evolution of SPAWAR's ASW Program Directorate, PD 80. He concludes by giving his assessment of the Navy's ASW work since the disestablishment of PM-4.

Repositories: DTRC

Individuals Mentioned:

Cann, Gerald
Carlson, RADM William
Dorman, RADM Craig
Kidd, ADM Isaac C., Jr.
Solomon, Dr. Louis

White, ADM Steven
Whittle, ADM Alfred J., Jr.
Williams, ADM John G., Jr.
Wolkensdorfer, RADM Daniel

Institutions:

Naval Air Systems Command
Naval Electronic Systems Command
Naval Intelligence Command
Naval Material Command
Naval Sea Systems Command
Naval Underwater Systems Center

Office of the Chief of Naval Operations
Presearch, Inc.
Space and Naval Warfare Systems Command
TRW, Inc.
U.S. Naval Academy

Subjects:

Antisubmarine warfare (ASW)
Disestablishment of NAVMAT
Establishment of SPAWAR
MK 46 torpedo
Operations and maintenance, Navy

Research and development
Sonar system
Sonobuoys
Systems analysis
Towed array

WARD, DR. NEWTON E.

Interviewer: J. D. Gerrard-Gough and Max R. Smith

Date of Interview: May 24, 1974

Documentation: 36 page transcript, index

Abstract: Dr. Ward describes the early NOTS organizational structure and talks about problems with air-to-ground missiles like Sidewinder and Dove. He comments on the first proposals for Walleye, its funding, and its building problems. Ward recalls its early launchings, production problems and conflicts with Martin Company.

Repositories: NWC, DTRC

Individuals Mentioned:

Crawford, Jack A.
McLean, Dr. William B.

Institutions:

Martin Company
Naval Ordnance Test Station

Subjects:

Missiles

Other Entries:

Dove missile project
Sidewinder Missile Project
Walleye missile project

WARD, DR. NEWTON E.

Interviewer: Albert B. Christman

Date of Interview: October 23, 1974

Documentation: 46 page transcript, index

Abstract: Dr. Ward discusses the management of NOTS when he first arrived, and Dr. Louis T. E. Thompson as NOTS' first technical director. He comments on the leadership abilities and roles of other technical directors, including Dr. Brown, Dr. William B. McLean, Dr. Thomas Amlie, and Dr. Haskell G. Wilson. Ward reflects on the commanding officers who have been at NOTS, military-civilian relationships there, and the trend toward more bureaucracy in R&D.

Repositories: NWC, DTRC

Individuals Mentioned:

Amlie, Dr. Thomas S.
Brown, Dr. Frederick W.
Frosch, Dr. Robert A.
LaBerge, Dr. Walter B.

McLean, Dr. William B.
Thompson, Dr. Louis T. E.
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

Amlie, Dr. Thomas
Brown, Dr. Frederick W.
McLean, Dr. William B.

Military-civilian relationships
Thompson, Dr. Louis T. E.
Wilson, Dr. Haskell G.

WARNER, DR. ARTHUR H.

Interviewer: J. D. Gerrard-Gough

Date of Interview: December 11, 1975

Documentation: 10 page transcript, index

Abstract: Dr. Warner discusses NOTS history, including a housing shortage problem, SECNAV Forrestal's visit to NOTS in 1947, and the role of ADM Switzer and ADM Vieweg in shaping NOTS. He comments on Dr. Bruce Sage, Dr. Wallace C. Brode, the need for a better computing center at NOTS, and Dr. William McLean's work on the Sidewinder Missile.

Repositories: NWC, DTRC

Individuals Mentioned:

Brode, Dr. Wallace
Forrestal, James
Hayward ADM John T.
McLean, Dr. William B.

Switzer, VADM W. G.
Sykes, RADM James B.
Vieweg, RADM Walter V. R.

Institutions:

Naval Ordnance Test Station

Subjects:

Naval Ordnance Test Station
Switzer, VADM W. G.
Vieweg, RADM Walter V. R.

Other Entries:

Sidewinder Missile Project

WASHBURN, DAVE

Interviewer: Dr. Mark Jacobsen

Date of Interview: November 1987

Documentation: 2 tapes, 26 page transcript

Abstract: Dave Washburn discusses his work to investigate and develop a communications system for flight deck operations. His investigations of flight deck communications systems led to work with interior communications and NTDS. He also discusses funding and working relationships with sponsors.

Repositories: NOSC

Individuals Mentioned:

Coburn, Dick
Eastman, Dick
Gales, Bob
Gibson, Dale
Harsh, Dr. Charlie

Klump, Dr. Roy
Montague, Dr. Bill
Newman, Dr. Klaus
Webster, Dr. John
Young, Robert

Institutions:

Naval Electronics Laboratory
Naval Sea Systems Command
NSROC

Subjects:

Flight deck communication
Funding
Operations research

Other Entries:

Man-on-the-Move Communications (MOMCOM)
Naval Tactical Data Systems

WATERMAN, DR. PETER

Interviewer: Unknown

Date of Interview: 1974

Documentation: 1 tape, 32 page transcript

Abstract: Dr. Waterman speaks about the maintenance of Navy R&D facilities and programs, cost effectiveness of programs, and Navy R&D, in general, from World War II to the present.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:
Clements, William

Subjects:
Cost effectiveness
Laboratory management
Research and development

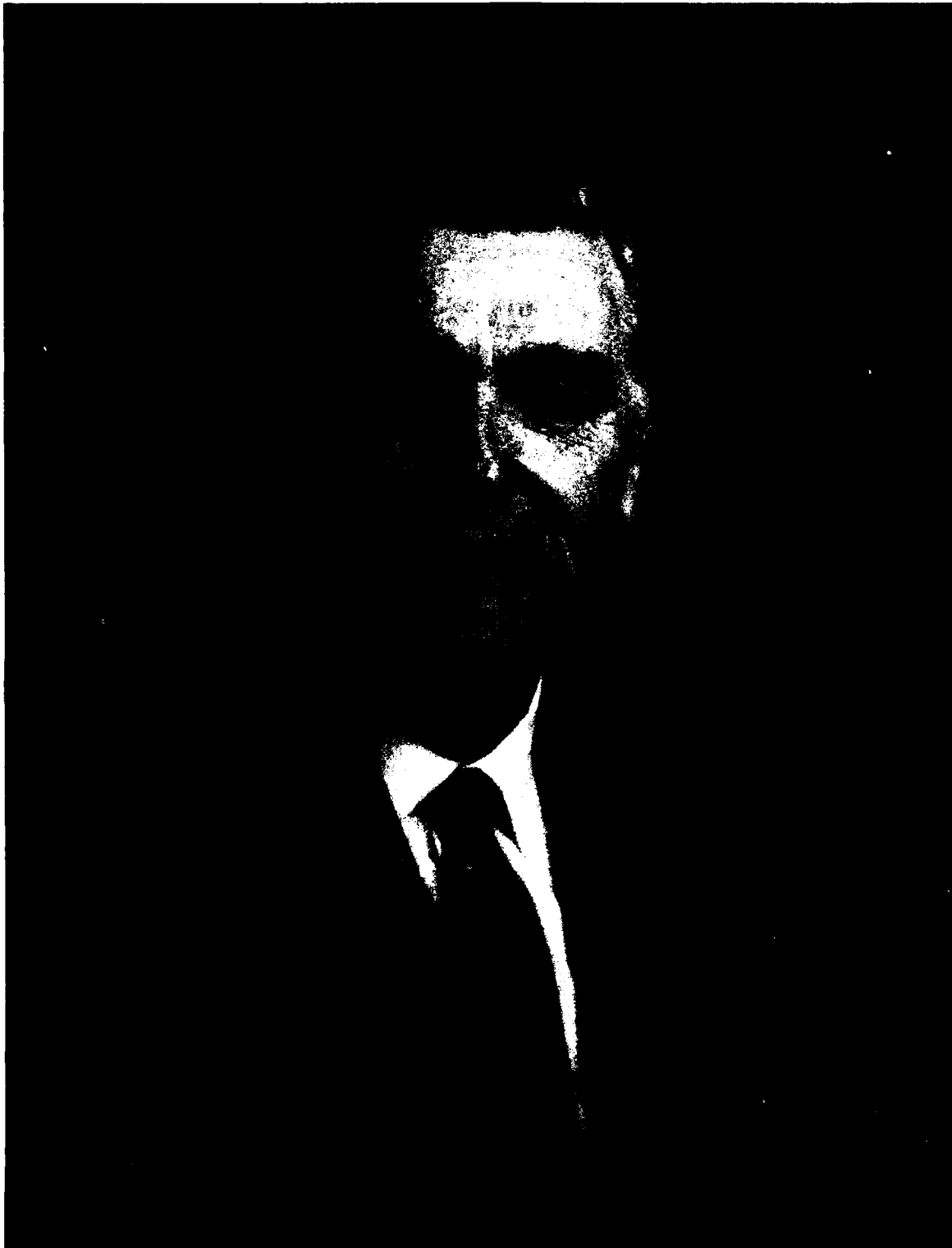
WATKINS, ADM JAMES

Interviewer: Dr. Joseph Marchese

Date of Interview: March 9, 1990

Documentation: 2 tapes, 31 page transcript, index

Abstract: This interview is one in a series conducted to gather information about the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Watkins begins by giving information regarding his military and professional career. He addresses the reasons for his selection as CNO and his goals and objectives upon assuming that office. ADM Watkins discusses the major issues leading to and the impetus behind the disestablishment of NAVMAT. He elaborates on the establishment of SPAWAR and on his views and those of Secretary of the Navy, John Lehman, regarding the functions of the new command in light of the overall weaknesses in the Navy in acquisition and systems integration. ADM Watkins details the choice of VADM Glenwood Clark as Commander of SPAWAR and states that VADM Clark's first order of business was to establish accountability. He discusses the reactions of the Assistant CNOs to the organizational changes and responds to concerns raised in Dr. James Colvard's "Haul-Down" report. ADM Watkins delineates the problems with funding WSA&E and provides details behind the reasons for placing the R&D centers under OCNR. He discusses the reactions of the systems commands to this placement of the R&D centers and the resultant placement of the centers under SPAWAR. ADM Watkins provides insight into the effectiveness of WSA&E outside of SPAWAR and gives information regarding the antisubmarine warfare mission in the Navy. He also provides his opinion relating to the Goldwater-Nichols bill on the Department of Defense. Finally, ADM Watkins lists important aspects of SPAWAR and responds to the concept of a reorganization or reestablishment of a command similar to NAVMAT with a four star admiral billet.



ADMIRAL JAMES WATKINS
CHIEF OF NAVAL OPERATIONS
JULY 1982 TO JUNE 1986

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
Busey, ADM James
Bush, George
Clark, VADM Glenwood
DiMascio, Dr. A. J.
Frosch, Dr. Robert A.
Hartmann, Dr. Gregory
Hogg, ADM James
Jones, GEN David
Lehman, John
Mooney, RADM John Bradford
Paisley, Melvyn
Reagan, Ronald

Rickover, ADM Hyman
Rowden, VADM William
Shantz, GEN Lawrence
Smith, VADM Levering
Train, ADM Harry
Trost, ADM Carlisle
Vogt, RADM Larry
Weinberger, Casper
Wertheim, VADM Robert
White, ADM Steven
Wilkinson, VADM Joseph, Jr.
Wolkensdorfer, RADM Daniel

Institutions:

Carnegie Institute
Central Intelligence Agency
Defense Intelligence Agency
Federal Aviation Administration
Joint Chiefs of Staff
National Academy of Sciences
National Governors' Association
National Security Agency
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Research Advisory Committee
Naval Sea Systems Command
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command
Special Projects Office
U.S. Air Force
U.S. Army
U.S. Congress
U.S. Marine Corps

Subjects:

Acquisition problems in the U.S. Navy
Antisubmarine warfare (ASW)
Booz, Allen, and Hamilton, Inc. Report
Clark, VADM Glenwood
Disestablishment of NAVMAT
Establishment of SPAWAR
Fleet ballistic missiles
Goldwater/Nichols/Bell Defense
Management Review bill
Grenada
"Haul-Down" report

Horizontal integration
Naval Renaissance: Navy of the
1980s
Navy Tactical Data System
Political influences upon operational
decisions
Research and development
Strategic Defense Initiative
Warfare systems architecture and
engineering

WATSON, CLEMENT

Interviewer: Unknown

Date of Interview: November 1972

Documentation: 65 page transcript

Abstract: Mr. Watson was Presentation/Public relations contractor for Polaris. This is one of a series of seven interviews on concept and development of Polaris program conducted by the U.S. Naval Institute Oral History Program.

Repositories: NHC, NWCM, USNA, USNI

Subjects:

Ballistic missile submarines

Fleet ballistic missiles

Nuclear missiles

Nuclear powered fleet ballistic
missile submarines

Submarine launched ballistic missiles
Weapons systems

Other Entries:

Polaris program

WATSON, DR. EARNEST C.

Interviewer: Albert B. Christman

Date of Interview: February 19, 20, 1970

Documentation: 68 page transcript, index

Abstract: Dr. Watson talks about scientists in World War I, Dr. Robert Millikan, and Dr. Richard C. Tolman. He describes CalTech's role in research during World War II, Dr. Charles C. Lauritsen, and Dr. Vannevar Bush. Watson comments on the development of rocket propellents and the proximity fuze and Dr. Max G. Mason. He details the development of NOTS' and CalTech's role there after World War II.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Bush, Dr. Vannevar

Fowler, Dr. William

Hale, George Ellery

Lauritsen, Dr. Charles C.

Mason, Dr. Max G.

Michelson, Dr. Albert A.

Millikan, Dr. Robert A.

Noyer, Arthur

Sage, Dr. Bruce

Tolman, Dr. Richard C.

Institutions:

California Institute of Technology

Naval Ordnance Test Station

Subjects:

Bush, Dr. Vannevar

Lauritsen, Dr. Charles C.

Mason, Dr. Max G.

Millikan, Dr. Robert A.

Other Entries:

Proximity fuze

Rocket propellents

WATSON-WATT, SIR ROBERT ALEXANDER

Interviewer: Unknown

Date of Interview: 1961

Documentation: 568 page transcript

Abstract: Watson-Watt reminisces about his involvement in meteorological work, World War I, radio and static studies, director finders, the Department of Scientific and Industrial Research, airborne radar, planned position indicators, secondary radar devices, interallied intelligence missions, and V-1 and V-2 raids.

Repositories: COL

Individuals Mentioned:

Tizard, Henry

Subjects:

Airborne radar

Interallied intelligence missions

Department of Scientific and Industrial
Research

Radar

WAYNICK, ARTHUR H.

Interviewer: Richard D. Glasow

Date of Interview: March 21, 1980

Documentation: Tapes, transcript

Abstract: Mr. Waynick describes his background and education, his work at the Harvard Underwater Sound Laboratory, and the Applied Research Laboratory.

Repositories: NUM

Institutions:

Applied Research Laboratory
Harvard University

Pennsylvania State University
Underwater Sound Laboratory

Other Entries:

Acoustics research

WEAVER, RADM JOHN C.

Interviewer: Dr. Joseph Marchese

Date of Interview: August 17, 1989

Documentation: 2 tapes, 22 page transcript, index

Abstract: This interview is one in a series conducted to gather information about the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Weaver begins by discussing the establishment of SPAWAR, stressing its coordination function among the systems commands, its role in systems integration, and its WSA&E function. He then addresses the objectives, accomplishments, and funding of the WSA&E Directorate (SPAWAR 30). RADM Weaver also speculates about why he was chosen to command SPAWAR, and elaborates on the reasons he was not assigned specific priorities and objectives. He then describes in some detail the various parts of the SPAWAR organization, including headquarters, the matrix support organization, each of the program directorates, the engineering centers, university laboratories, and R&D centers. He also discourses on the placement of the R&D centers within SPAWAR, the R&D centers' preferences concerning organizational placement, and the relationship between the R&D centers and SPAWAR. RADM Weaver discusses the role of the DNL. He then assesses the performance of R&D centers and answers questions regarding whether or not they should function as "full-spectrum centers." Questions on the proper mix of in-house/out-of-house work of R&D centers, and recent efforts to define precisely their missions follow. The interview proceeds to funding matters; RADM Weaver elaborates on the Navy Industrial Fund's method of finance and on the effects of budget tightening upon the R&D community. He provides information on certain problems involved in the Navy's procurement process, such as long lead times and excessive costs. He then assesses the performance of the R&D centers' Commanding Officers and Technical Directors. In this section he challenges, substantiates, or qualifies various criticisms that the R&D centers have received. RADM Weaver also addresses technology base funding and programs, speculates regarding the future of R&D centers, and presents some of SPAWAR's achievements during his tenure. Finally, he briefly discusses engineering development and some of the contributions made by the Chief of Naval Operations ADM Carlisle Trost.

Repositories: DTRC

Individuals Mentioned:

Altwegg, RADM David
Brooks, RADM Thomas
Bunleavy, VADM Richard
Busey, ADM James
Hogg, ADM James
Huang, Theodore S.
Lennox, RADM Glen

Martin, VADM Edward
McCarthy, VADM Paul, Jr.
Trost, ADM Carlisle
Tuttle, VADM Jerry
Wilkinson, VADM Joseph, Jr.
Wolkensdorfer, RADM Daniel



REAR ADMIRAL JOHN C. WEAVER, USN

Institutions:

Applied Physics Laboratory/University
of Washington
Applied Research Laboratories/
University of Texas
Applied Research Laboratory/
Pennsylvania State University
Defense Science Board
Johns Hopkins University/Applied
Physics Laboratory
Naval Air Development Center

Naval Air Systems Command
Naval Coastal Systems Center
Naval Electronic Systems Command
Naval Material Command
Naval Ocean Systems Command
Naval Research Advisory Council
Naval Research Laboratory
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Center

Subjects:

Acquisition
AEGIS Program
Antimine warfare
Antisubmarine warfare (ASW)
Basic research
Block funding
Command control, communication, and
intelligence
Contracting
Director of Navy Laboratories
Disestablishment of NAVMAT
Engineering, in-service and development
Establishment of SPAWAR
Fleet Satellite Communications

Global positioning satellite
In-house, out-of-house mix of work
Information Transfer Systems Program
Directorate
Marine Corps Systems Program Directorate
Program Directorate Information
Management Systems
Research and development centers
Software support
Space and Sensor Systems Program
Directorate
Strategic Defense Initiative
Surveillance, undersea and wide-area

WEAVER, DR. WARREN

Interviewer: Unknown

Date of Interview: 1961

Documentation: 783 page transcript

Abstract: Mr. Weaver discusses World War II, the NDRC, range finders, fuzes, bomb sights, gun directors, electrical predictors, computers, and the Applied Mathematics Panel.

Repositories: COL

Individuals Mentioned:

Millikan, Dr. Robert A.
Tizard, Henry

Institutions:

Applied Mathematics Panel
National Defense Research Committee

Subjects:

Applied Mathematics Panel
Bomb sights
Computers
Elictical predictors

Fuzes
Ordnance
Range finders

WERTENBERGER, I. BRUCE

Interviewer: Elizabeth Babcock

Date of Interview: December 12, 1988

Documentation: 61 page transcript, index

Abstract: Mr. Wertenberger discusses computers at NWC from the perspective of more than 30 years spent working with information retrieval systems at NWC and its predecessor organization, the Naval Ordnance Test Station. He traces the Center's computerization from the early 1950s, when the first card-oriented computers arrived on base, through the IBM 701 (of which NOTS had Serial No. 7), on through the Weapon Systems Simulation Facilities (WSSFs) and Weapon Systems Support Activities (WSSAs) of today. He briefly describes NOTS' pioneer role in digitizing telemetry signals, as well as contractor roles in reducing data for early tests. He also recalls some of the colorful and innovative personalities with whom he worked over the years.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Hays, Burrell W.
Highberg, Dr. Ivar
Lakin, Lee

Tillett, Harley
Ward, Dr. Newton E.

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

Other Entries:

Brooks Bill
Computers
Contractors
Interlaboratory Computing Facilities
Committee

Navy Laboratory Computer Committee
Weapon Systems Simulation Facilities
Weapon Systems Support Activities

WERTHEIM, VADM ROBERT

Interviewer: Dr. John T. Mason, Jr.

Date of Interview: January 6, 21, 23, 27, and February 9, 1981

Documentation: 343 page transcript

Abstract: A birth-to-present day oral memoir, concentrating on the admiral's 35-year naval career.

Repositories: USNI, USNA, NHC, NWC

Individuals Mentioned:

Brown, Dr. Harold
McNamara, Robert S.
Smith, VADM Levering

Institutions:

Lawrence Livermore Laboratory
Lockheed Corporation

Subjects:

Strategic weapons system development

Other Entries:

Polaris	Transit program
Poseidon	TRIDENT program
Strat-X	

WESSEL, PAUL

Interviewer: Dr. Joseph Marchese

Date of Interview: March 19, and April 3, 26, 1990

Documentation: 3 tapes, 61 page transcript, index

Abstract: This interview is one in a series conducted to collect information about the disestablishment of NAVMAT and the establishment of SPAWAR. Mr. Wessel provides information about his professional background, then discusses the development of WSA&E in SPAWAR and gives different perspectives of other places the WSA&E function could have been assigned. Mr. Wessel elaborates on how the disestablishment of NAVMAT and the establishment of SPAWAR preempted discussions on the placement of WSA&E. He provides insight into Dr. Colvard's understanding that WSA&E was being designed for NAVMAT which would continue to maintain a four-star billet at the top and oversee the systems commands. He further states that the concept of WSA&E did not originate in the Office of the Secretary of the Navy (Secretariat). Dr. Wessel delineates the efforts to correct the mismatches between the AEGIS program and ACDS and addresses the effect of personnel shifts from NAVSEA to SPAWAR. He details the meeting at the Naval Air Test Center (NATC), where architecture and engineering in force level testing was discussed, as well as the joint efforts between him and CAPT Baldwin regarding TLWRs. Mr. Wessel follows by describing the development of test facilities at Wallops Island by NSWC. Mr. Wessel then begins a lengthy discussion of documents he holds that led to the meeting at NATC and eventually to Secretary Lehman establishing SPAWAR and enunciating SPAWAR's concepts and operations, including WSA&E. The documents Mr. Wessel elaborates on include RADM Kollmorgan's memorandum of 10 April 1984 on battle management; a 21 November 1984 memorandum regarding the integration of C3 systems; a Vice Chief of Naval Operations (VCNO) memorandum of 5 August 1985 concerning the CNO Executive Board on BFIM; and the effects of VADM Miller's study in the summer of 1985 on battle force management. Mr. Wessel discusses his own opposition to NOSC as Battle Force Systems Engineer (BFSE) and then reviews an OP-095 memorandum of 13 August 1985 which proposed the creation of a warfare requirements board. Mr. Wessel elaborates on the early growth of SPAWAR, then returns to a discussion of a document relating to

a 1984 meeting regarding battle group systems engineering (BGSE). He examines documentation relating to the August 1985 CEB and a working paper by NOSC in response to VADM Miller's study. Mr. Wessel concludes his examination of documents by reviewing how various studies and CEBs affected the SECNAV's development of SPAWAR's organization and operations. Mr. Wessel addresses VADM Clark's efforts to make SPAWAR work and deals with the issue of land-based test sites at Wallops Island. He then examines the objections encountered in the development of those sites; NSWC's long-time support of the sites and the effect VADM Clark's objections had on NSWC; reasons for NOSC's objections; and the recommendations of a study group chaired by Mr. Wessel looking into the need of force level test and evaluation facilities. Mr. Wessel describes efforts to tighten SPAWAR's organization and mission and its response to CEB criticisms. He discusses the problem of weak productivity by SPAWAR 30 and the perception that SPAWAR was passive in the face of obstacles. Mr. Wessel elaborates on VADM Clark's attempts to obtain resources and deals with the issue of VADM Clark's apparent reluctance to seek greater support from the Secretariat. He also provides insight into funding for SPAWAR 30 out of the R&D overhead and the problems encountered in obtaining direct funding for WSA&E. Mr. Wessel details the accomplishments SPAWAR has achieved in architecture and engineering in light of the continued perception that SPAWAR 30 lacks productivity. He recalls VADM Miller's reaction to SPAWAR 30's claims in WSA&E and compares the differing points of view between the specific needs of OP-07 and the broader view held by SPAWAR 30 of the architecture and engineering charter. Mr. Wessel addresses the relationship between SPAWAR and the R&D centers and the reactions of customers to the WSA&E function. In closing, Mr. Wessel elaborates on the relationship between SPAWAR 30 and the other program directorates in SPAWAR and also SPAWAR's efforts at integrating systems across other systems commands.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert
 Baggett, VADM Lee
 Baldwin, CAPT Edwin
 Battista, Tony
 Batzler, RADM Jack
 Bodensteiner, RADM Wayne
 Busey, ADM James
 Cann, Gerald
 Clare, Dr. Thomas
 Clark, VADM Glenwood
 Colvard, Dr. James
 Doak, Robert
 Hays, ADM Ronald
 Hillyer, Robert
 Hogg, ADM James
 Holloway, RADM Lawrence
 Holt, CAPT Richard
 Kelso, ADM Frank

Kirksey, VADM Robert
 Kollmorgan, RADM L. S.
 Langston, CDR Marvin
 Layman, RADM L.
 Lehman, John
 Metcalf, VADM Joseph
 Meyer, RADM Wayne
 Miller, VADM Richard
 Paisley, Melvyn
 Pollard, Dr. James R.
 Roane, RADM Donald
 Rowden, VADM William
 Topping, RADM Robert
 Trost, ADM Carlisle
 Tunstall, Dr. Edward
 Watkins, ADM James
 Weaver, RADM John
 Wilkinson, VADM Joseph, Jr.

Institutions:

CNO Executive Board
Defense Advance Research Project Agency
Director of Navy Laboratories
Federation of Systems Analysis
Directors
Hughes Aerospace Corporation
Johns Hopkins University/Applied Physics
Laboratory
Massachusetts Institute of Technology
National Aeronautics and Space
Administration
Naval Air Systems Command
Naval Air Test Center
Naval Material Command
Naval Ocean Systems Center

Naval Sea Systems Command
Naval Surface Warfare Center
Naval Underwater Systems Center
Naval War College
Naval Weapons Center
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Office of the Secretary of the Navy
Pacific Missile Test Center
RCA Corporation
Space and Naval Warfare Systems Command
Special Projects Office
U.S. House of Representatives Armed
Services Committee
Wallops Island test facilities

Subjects:

Acoustic systems development
Advanced Combat Direction System
AEGIS program
Afloat Correlation Systems Center
Aircraft carrier battle force
Antiair warfare
Antisubmarine warfare (ASW)
Antisurface warfare
Battleforce systems engineering
Battleforce information management
Clark, VADM Glenwood
Combat systems engineering and
development
Command control, communication, and
intelligence
Communication Support System
Disestablishment of NAVMAT
Electromagnetic environmental effects
Establishment of SPAWAR
Force level testing
Force systems engineering

Force warfare systems architecture
and engineering
Independent research/independent
exploratory development
Interface requirements documents
Manage-to-payroll
Nonacoustic systems development
Ocean Surveillance Information System
Operations and Maintenance, Navy
Outer air battle
Research, development, test, and
evaluation (RDT&E)
Saturday morning group
Strike warfare
Tactical Command System
Task Force Command Center
TOMAHAWK cruise missile program
Top-level warfare requirements
Warfare Support System
Warfare systems architecture and
engineering

WHITE, DR. HOWARD J., JR.

Interviewer: Dr. Vincent Ponko

Date of Interview: December 4, 1982

Documentation: 4 tapes, 27 page transcript, index

Abstract: Dr. White discusses the background to his appointment as Special Assistant for Research to the ASN (R&D). He describes his duties, including budgeting 6.1 and 6.2 funds, working as a liaison between the labs and ASN (R&D), and studying the problem of laboratory management in a military-civilian matrix. White comments on the impact of the Task Force 97 Project Report, the Dillon Review of 1962, and the Furnas and Austin Reports. He talks about the Sherwin Plan and the Navy R&D community's reaction to it, and key R&D people like Dr. William B. McLean, Dr. Haskell G. Wilson, and SECNAV

Paul Nitze. White discusses the needs the Navy's in-house labs must meet, the justification for in-house labs, and Navy labs in the early 1960's. He also comments on SECDEF McNamara.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

McLean, Dr. William B.

McNamara, Robert S.

Nitze, Paul

Sherwin, Dr. Chalmers

Wakelin, Dr. James H.

Wilson, Dr. Haskell G.

Institutions:

Office of Secretary of Defense

Office of Secretary of the Navy

Subjects:

Basic research

Foundational research

Laboratory management

Other Entries:

Austin Report

Dillon Report

Furnas Report

Sherwin Plan

Task Force 97

WHITE, ADM STEVEN

Interviewer: Dr. Joseph Marchese

Date of Interview: May 29, 1990

Documentation: 1 tape, 28 page transcript, index

Abstract: This interview is one in a series conducted to collect information about the disestablishment of NAVMAT and the establishment of SPAWAR. ADM White initially provides information on his professional background and then evaluates the effectiveness of NAVELEX. He also elaborates on his peripheral role in the establishment of SPAWAR and draws comparisons between SPAWAR and NAVELEX. ADM White then addresses the possibility of the WSA&E function being placed in NAVMAT before it was disestablished. Furthermore, he provides the rationale behind his disestablishing the Antisubmarine Warfare Systems Directorate, PM-4; his opinions of why NAVMAT was disestablished; and the rationale given by the SECNAV and the CNO for the disestablishment of NAVMAT. ADM White evaluates the effect the disestablishment of NAVMAT had on the establishment of SPAWAR. He examines the rationale behind placing the DNL and the R&D centers under the OCNR and discusses the political influences on the R&D centers while under the OCNR. ADM White elaborates on the efforts of the Assistant Secretary of the Navy for Research, Engineering, and Systems to place tighter controls on senior civilians in the R&D centers. He concludes his interview with a discussion on the establishment of the Material Professional and the role of ONAS after the disestablishment of NAVMAT.

Repositories: DTRC

Individuals Mentioned:

Arnold, RADM Henry
Baciocco, VADM Albert
Batzler, RADM Jack
Bodensteiner, RADM Wayne
Bump, RADM Stanley
Busey, ADM James
Clark, VADM Glenwood
Colvard, Dr. James
Dorman, RADM Craig
Fowler, VADM Earl
Hays, Burrell W.
Hays, ADM Ronald
Hillyer, Robert
Hogg, ADM James
Josephson, ADM Joseph
Langston, CDR Marvin
Latham, Dr. Donald
Law, Howard
Lehman, John
Metcalf, VADM Joseph
Meyer, RADM Wayne

Miller, VADM Richard
Mooney, RADM John Bradford
Morton, Gary
Paisley, Melvyn
Pittenger, RADM Richard
Pollard, Dr. James R.
Pyatt, Everett
Rice, RADM Joseph
Rowden, VADM William
Rumpf, Richard
Schick, RADM George
Schiefer, Gerald
Waller, VADM Edward
Watkins, ADM James
Weaver, RADM John
Wessel, Paul
Whittle, ADM Alfred J., Jr.
Wilkinson, VADM Joseph, Jr.
Williams, ADM John G., Jr.
Witter, RADM Raymond
Wolkensdorfer, RADM Daniel

Institutions:

Department of Defense
Director of Navy Laboratories
Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command
Naval Material Establishment

Naval Sea Systems Command
Office of Naval Acquisition Support
Office of the Chief of Naval Operations
Office of the Chief of Naval Research
Office of the Secretary of the Navy
Space and Naval Warfare Systems Command

Subjects:

AEGIS program
Antisubmarine warfare (ASW)
Bilinear organization
Command control, communication, and
intelligence
Disestablishment of NAVMAT
Establishment of SPAWAR

Material professional program
Office of Naval Acquisition Report
Top-level warfare requirements
Unilateral organization
Warfare systems architecture and
engineering

WHITFIELD, ROBERT

Interviewer: Dr. David K. Allison

Date of Interview: June 10, 1985

Documentation: 1 tape

Abstract: Mr. Whitfield discusses the issues surrounding the dissolution of NAVMAT and the creation of the SPAWAR. The idea was to eliminate layers of bureaucracy in acquisition, and to create a systems command to coordinate acquisition of a coherent battle force architecture. Whitfield stresses that the driving forces behind this reorganization were SECNAV Lehman's determination to reduce bureaucracy and congressional pressures to reduce overhead, and that Lehman and ASN (RE&S) Paisley both were behind the decision to keep the Navy's R&D Centers together under the Chief of Naval Research,

rather than parcel them out to the Systems Commands. As of the date of this interview, Mr. Whitfield asserted that the functions of NAVMAT headquarters had not yet "gone away" but had been divided between ONAS, CNR, and the Navy Comptroller.

Repositories: DTRC

Individuals Mentioned:

Bodensteiner, RADM Wayne
Bump, RADM Stanley
Colvard, Dr. James

Lehman, John
Paisley, Melvyn

Institutions:

Naval Material Command
Office of Chief of Naval Research
Office of Naval Acquisition Support
Office of Secretary of the Navy

R&D centers
Space and Naval Warfare Systems Command
Systems commands

Subjects:

Disestablishment of NAVMAT
Establishment of SPAWAR
Management of procurement

WHITMARSH, DAVID

Interviewer: Nelson Wood

Date of Interview: January 26, 1979

Documentation: Tapes, transcript

Abstract: Mr. Whitmarsh talks about his work at the Ordnance Research Laboratory.

Repositories: NUM

Institutions:

Bureau of Ordnance
Naval Torpedo Station

Ordnance Research Laboratory/
Pennsylvania State University

Subjects:

Torpedoes

Other Entries:

Acoustics research
Ordnance research

WHITNEY, MARVIN

Interviewer: Steven J. Dick

Date of Interview: May 2, 1988

Documentation: 1 tape, 43 page transcript

Abstract: Mr. Whitney describes his years at the Naval Observatory in the chronometer ship, 1940 to 1950.

Repositories: USNO

Subjects:

Chronometer work at Naval Observatory

WHITTLE, ADM ALFRED J., JR.

Interviewer: Dr. Joseph Marchese

Date of Interview: April 23, 1990

Documentation: 1 tape, 22 page transcript, index

Abstract: This interview is one in a series conducted to collect information about the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Whittle first discusses the Navy's effectiveness in research, development, and acquisition (RD&A) during his tenure. He then provides information regarding the idea that NAVMAT was an extra layer, and whether or not the disestablishment of NAVMAT was justified. ADM Whittle asserts that the realignments consequent to NAVMAT's disestablishment have not improved RD&A. The interview proceeds to an assessment of the effectiveness of NAVELEX, and whether or not the conversion of NAVELEX to SPAWAR was justified. ADM Whittle does believe that RD&A has improved somewhat since SPAWAR's establishment. An extended discourse on the "Whittle Report," and its recommendations on the placements of R&D centers, university laboratories, and field activities follows. ADM Whittle elaborates on the requirements for effective R&D centers, and the effect of two-star management (by the Chief of Naval Research) of R&D centers. Finally, he assesses the technical competence of the systems commands during his tenure.

Repositories: DTRC

Individuals Mentioned:

Ailes, RADM Robert
Baciocco, VADM Albert
Clark, VADM Glenwood
Colvard, Dr. James
Doak, Robert
Lehman, John

McCarthy, VADM Paul, Jr.
Paisley, Melvyn
Pyatt, Everett
White, ADM Steven
Wilkinson, VADM Joseph, Jr.
Williams, ADM John G., Jr.

Institutions:

Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Space and Naval Warfare Systems Command

Subjects:

AEGIS program
Disestablishment of NAVMAT
Establishment of SPAWAR
Naval Electronic Systems Command
Navy university laboratories
Research and development centers
Research, development, and acquisition

System commands
Tactical nuclear weapons
Technical directors
Warfare systems architecture and engineering
"Whittle Report"

WIEGAND, DR. JAMES

Interviewer: Michelle Ballenger

Date of Interview: August 1977

Documentation: 28 page transcript, index

Abstract: Dr. Wiegand talks about his association with the Solid Propellant Branch at NOTS. He describes the China Lake Pilot Plant, social interaction between military and civilian personnel, and Dr. Louis T. E. Thompson. Wiegand comments on program direction from Washington, relations with Aerojet and major problems encountered by the rocket department. He also explains his reasons for leaving NOTS.

Repositories: NWC, DTRC

Individuals Mentioned:

Ellis, Dr. Emory L.
Gould, Al
McLean, Dr. William B.
Patton, Harold

Sage, Dr. Bruce
Smith, VADM Levering
Thompson, Dr. Louis T. E.

Institutions:

Aerojet General Corporation
China Lake Pilot Plant

Naval Ordnance Test Station
Naval Weapons Center

Subjects:

China Lake Pilot Plant
Military-civilian relationships
Thompson, Dr. Louis T. E.

Other Entries:

Rocket research

WILCOX, DOUGLAS J.

Interviewer: J. D. Gerrard-Gough

Date of Interview: October 23, 1975

Documentation: 11 page transcript, index

Abstract: Mr. Wilcox recalls his entry at NOTS-Pasadena as a "NP" (New Professional) and his later appointment as Head of the Underwater Ordnance

Department. He describes the communication problems between China Lake and Pasadena and how they were solved. Wilcox comments on problems in the military-civilian relationships at NOTS, the emphasis there on the Junior Professional Program, and his switch to the Naval Undersea Center at San Diego, CA. He also states that he did not favor the break-up of the China Lake-Pasadena arrangement.

Repositories: NWC, DTRC

Individuals Mentioned:

McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Naval Ordnance Test Station
Naval Undersea Center

Subjects:

Junior Professional Program
Military-civilian relationships
Naval Ordnance Test Station

WILCOX, DOUGLAS J.

Interviewer: Albert B. Christman

Date of Interview: March 13, 1978

Documentation: 1 tape, 22 page transcript

Abstract: Mr. Wilcox comments on his early work at NOTS, his move from NOTS to NUC, and his stint as Technical Director there. He talks about the influence of Dr. William B. McLean; in particular, his ability at NOTS/NWC to cut through red tape and achieve real progress in weapons systems. Mr. Wilcox also describes the problem of layering in the federal bureaucracy, the need for greater trust and flexibility in the laboratory system, and for a better recorded history of what happened at Navy laboratories.

Repositories: NHC, DTRC

Individuals Mentioned:

McLean, Dr. William B.
Wilson, Dr. Haskell G.

Institutions:

Naval Ocean Systems Center
Naval Ordnance Test Station

Subjects:

Laboratory administration
Layering
McLean, Dr. William B.

WILCOX, DR. HOWARD A.

Interviewer: Mickey Strang

Date of Interview: May 25, 1976

Documentation: 13 page transcript, index

Abstract: Dr. Wilcox comments on the projects he was involved in at NOTS, including NOTSNIK, a response to Sputnik, and ASROC. He also talks about satellites as collectors of solar energy and their extremely high cost.

Repositories: NWC, DTRC

Institutions:

Naval Ordnance Test Station

Naval Weapons Center

Subjects:

Satellites

Other Entries:

Antisubmarine rocket (ASROC)

NOTSNIK satellite

Sputnik

WILCOX, DR. HOWARD A.

Interviewer: Albert B. Christman with Bert Larson

Date of Interview: March 15, 1978

Documentation: 1 tape, 23 page transcript

Abstract: Dr. Wilcox describes various problems with Navy labs before World War II, including increasing bureaucracy, the insertion of new managers without wartime lab experience, and budget constraints. He comments on lack of innovative weapons ideas and narrowly defined lab missions. He discusses Dr. William B. McLean's leadership qualities, his ability to cut red tape, and his technical and administrative skills. Wilcox comments on Dr. Walter LaBerge as an R&D leader, good aspects of the Navy lab system, and the roles of headquarters, labs, and industry in Navy R&D. He states that there is a need for more vigorous prosecution of Navy R&D, talks about the effect of Sputnik and the Navy's role in Vietnam.

Repositories: DTRC

Individuals Mentioned:

LaBerge, Dr. Walter B.

McLean, Dr. William B.

Thompson, Dr. Louis T. E.

Institutions:

Naval Ordnance Test Station

Naval Weapons Center

Subjects:

Budgeting
LaBerge, Dr. Walter
McLean, Dr. William B.

Other Entries:

Sputnik
Vietnam War

WILCOX, DR. HOWARD A.

Interviewer: Starla Hall

Date of Interview: September 1980

Documentation: 36 page transcript

Abstract: Dr. Wilcox gives his impressions of his longtime colleague Dr. William B. McLean. He talks about McLean's involvement on the Sidewinder Missile Project; in particular, his leadership style, technical problems involved, and problems of Air Force acceptance of the missile. Wilcox comments on McLean as NOTS Technical Director and as a lobbyist in Washington. He discusses McLean's frustration with increasing government bureaucracy, his move to NUC as TD, and problems in combining NOTS and NEL functions at NUC. He comments on officers' attitudes toward McLean, McLean's retirement, and the role of Edith LaVerne McLean.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

McLean, Edith LaVerne (Mrs. William B.)
McLean, Dr. William B.

Institutions:

Naval Electronics Laboratory	Naval Weapons Center
Naval Ordnance Test Station	U.S. Air Force
Naval Undersea Center	

Subjects:

McLean, Dr. William B.

Other Entries:

Sidewinder Missile Project

WILHELM, PETER G.

Interviewer: Dr. David K. van Keuren and Dean Bundy

Date of Interview: November 19 and December 14, 1987

Documentation: Tape, 18 page transcript

Abstract: Mr. Wilhelm traces the growth of satellite technology research and related studies in space science at the Naval Research Laboratory from

1959 to the present. He engaged in Navy programs dealing with various aspects of space study and made significant contributions to the development and application of satellites, including those for Navy communication, navigation, and environmental and general surveillance. Currently Director of the Naval Center for Space Technology, Mr. Wilhelm asserts that the Navy's role in space faces challenges to its future existence which might be successfully addressed by the Navy changing what it calls its "force structure" and by seeking to provide affordable access to space.

Repositories: NRL

Individuals Mentioned:

Coffey, Dr. Timothy
Dix, Ed
Easton, Roger
Friedman, Dr. Herbert
Hammarstrom, Lee
Hellrich, Fred V.

Lehman, John
Lorenzen, Howard
Mayo, Reid
Rabin, Dr. Herb
Trost, ADM Carlisle
Votaw, Marty

Institutions:

Applied Physics Laboratory
Bell Labs
Department of Defense
Fort Monmouth
National Aeronautics and Space
Administration

Naval Ocean Systems Center
Naval Post Graduate School
Naval Research Laboratory
Naval Space Command
U.S. Naval Academy

Subjects:

Digital electronics
Force structure
Global positioning satellite
Gravity gradient attitude
stabilization of satellites
MILSTAR satellite communications
system
Naval Center for Space Technology
Naval Space Surveillance (NAVSPASUR)

"Roles and missions" debate
Satellite Techniques Branch
SEALAR
Solid state memory systems
Superconductivity
Technology transfer
Ultra-high frequency follow-on
program

Other Entries:

Artificial Intelligence
ASW operations
Low-Frequency Trans-Ionospheric
Satellite (LOFTI);
Ocean thermal currents
Satellite maneuvering

Satellite networking
Solar Radiation (SOLRAD) Program
Surveillance Calibration Satellites
(SURCALs)
Vanguard program

WILKINSON, VADM JOSEPH, JR.

Interviewer: Dr. Joseph Marchese

Date of Interview: February 23, 1990

Documentation: 2 tapes, 37 page transcript, index

Abstract: This interview is one in a series conducted to collect information about the disestablishment of NAVMAT and the establishment of

SPAWAR. VADM Wilkinson initially discusses the reasons for establishing SPAWAR, and the role of SPAWAR in relation to other systems commands. The interview proceeds to a description of Dr. James Colvard's "Haul-Down" report, and the transfers of product lines and R&D centers that followed the report. VADM Wilkinson states that these transfers were undertaken to assist SPAWAR to perform its work in WSA&E more effectively. VADM Wilkinson then elaborates on his role in the changes pertinent to R&D centers. Two conflicting memos concerning SPAWAR's function are discussed next. An extended description of program realignments follows: VADM Wilkinson addresses electronic warfare programs, force-pervasive versus platform-specific criteria, and WSA&E matters, and assesses the results of these realignments. Finally, he provides information regarding the major obstacles in SPAWAR's performance of the WSA&E function.

Repositories: DTRC

Individuals Mentioned:

Baciocco, VADM Albert

Busey, ADM James

Clark, VADM Glenwood

Colvard, Dr. James

Hogg, ADM James

Lehman, John

Mooney, RADM John Bradford

Paisley, Melvyn

Rowden, VADM William

Weaver, RADM John

Institutions:

Naval Air Development Center

Naval Air Systems Command

Naval Electronic Systems Command

Naval Material Command

Naval Sea Systems Command

Naval Weapons Center

Office of Naval Acquisition Support

Office of the Chief of Naval Operations

Space and Naval Warfare Systems Command

Subjects:

Air Traffic Control Program

Airborne electronic warfare

Command control

Disestablishment of NAVMAT

Establishment of SPAWAR

"Haul Down" report

Reconnaissance, Electronic Warfare,
Special Operations, Intelligence

Evaluation (REWSON) Program

Warfare systems architecture and
engineering

Whittle Committee Study

WILLEY, THOMAS

Interviewer: Tom Misa and Ed Todd

Date of Interview: July 15, 1982

Documentation: 2 tapes, index

Abstract: Mr. Willey discusses his personal background and his work in Systems Engineering at NADC, including the A-NEW Program, Airborne Computer Development Systems in the 1960's, and the Proteus System of Signal Processing. He talks about the impact of Systems Engineering, the Polaris Submarine and its effect on ASW, and reorganization of NADC in the early 1970's. Willey comments on audits of programs over 6-12 year periods.

Repositories: NADC, DTRC

Individuals Mentioned:

Aslo, Izzy
Cody, Harold

Institutions:

Anti-Submarine Warfare Laboratory
Naval Air Development Center
Naval Air Systems Command

Subjects:

Antisubmarine aircraft
Antisubmarine warfare (ASW)
Systems engineering

Other Entries:

Polaris submarines
Proteus System

WILLIAMS, ADM HENRY

Interviewer: Unknown

Date of Interview: 1964

Documentation: 251 page transcript

Abstract: ADM Williams recalls his career in the Navy, remembering the Spanish-American War, taking a graduate course in naval architecture in Paris, 1899-1901, his work as a naval construction specialist dealing with launching problems, the developments of plastic ship bottom paint, and submarine rescue chambers.

Repositories: COL, NHC

Individuals Mentioned:

Land, ADM Emory S.	Sims, ADM William
Robinson, ADM Samuel M.	Taylor, ADM Henry

Institutions:

Bureau of Ships

Subjects:

Naval architecture
Naval construction
Polymers

Other Entries:

Submarine rescue chambers

WILLIAMS, ADM JOHN G., JR.

Interviewer: Leroy L. Doig, III, and Dr. David K. Allison

Date of Interview: July 12, 1983

Documentation: Diskette, 9 page transcript

Abstract: ADM Williams discusses the purpose of R&D Centers, changes that occurred during his tenure as CNM, the Corporate Plan for NAVMAT, selection of Technical Directors, selection of good personnel, the laboratories' role as "smart buyers" for the Navy, and the laboratories as part of NAVMAT.

Repositories: NWC, DTRC

Individuals Mentioned:

Colvard, Dr. James

Hillyer, Robert

Paisley, Melvyn

Whittle, ADM Alfred J., Jr.

Institutions:

Naval Material Command

Office of Chief of Naval Operations

Office of Director of Navy Laboratories

Subjects:

Personnel research

Technical directors

Other Entries:

Corporate plan

Navy Industrial Fund

WILLIAMS, ADM JOHN, JR.

Interviewer: Dr. Joseph Marchese

Date of Interview: March 6, 1990

Documentation: 1 tape, 21 page transcript, index

Abstract: This interview is one in a series conducted to collect information about the disestablishment of NAVMAT and the establishment of SPAWAR. ADM Williams describes his major responsibilities during his tenure as CNM. He then discusses his relationships, as CNM, with the Assistant Secretary of the Navy for Shipbuilding and Logistics, and the ASN for Research, Engineering, and Systems. ADM Williams elaborates on issues he dealt with at NAVMAT, such as procurement overpricing and the quality of his technical employees, and how these issues were related to NAVMAT's overall effectiveness. He believes that had the Navy continued his procedure of reducing the NAVMAT staff to a small group of qualified professionals, then the Navy's material establishment would function more effectively today than it has, consequent to NAVMAT's disestablishment. Finally, ADM Williams discusses the requirements for an effective CNM.

Repositories: DTRC

Individuals Mentioned:

Carter, Jimmy
Clark, VADM Glenwood
Colvard, Dr. James
Fowler, VADM Earl
Jeremiah, ADM David

Lehman, John
Paisley, Melvyn
Sawyer, George
White, ADM Steven
Whittle, ADM Alfred J., Jr.

Institutions:

Naval Air Systems Command
Naval Electronic Systems Command
Naval Material Command

Naval Sea Systems Command
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command

Subjects:

Effectiveness of Naval Material Command
Material professional program
Procurement overpricing

Relationship between military and
civilians in Navy's material
establishment
Role of Chief of Naval Material

WILLS, JAMES R.

Interviewer: Leroy L. Doig, III

Date of Interview: January 7, 1981

Documentation: 29 page transcript, index

Abstract: Mr. Wills comments on the closure of the NOTS branch at Corona and its move to China Lake in 1970. He talks about fuzing projects, in general, and the Air Force, Navy, and NWC's contact with NATO. Wills extols NWC's safety record and reflects on the work of Mr. Robert Hillyer, the lack of continuity at the Technical Director level at NWC, and NWC as a national asset.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Hillyer, Robert
Nastromeno, John

Institutions:

Naval Ordnance Test Station
Naval Weapons Center

North Atlantic Treaty Organization
U.S. Air Force

Other Entries:

Fuze research

WILSON, CAPT EUGENE EDWARD

Interviewer: Unknown

Date of Interview: 1962

Documentation: 974 page transcript

Abstract: Naval Academy; Engineering School, Columbia; Aviation Mechanics School, Great Lakes; Bureau of Aeronautics; private industry.

Repositories: COL, NHC

Individuals Mentioned:

Boeing, William
Forrestal, James
King, FADM Ernest

Moffett, ADM William A.
Sikorsky, Igor

Subjects:

Bureau of Aeronautics

WILSON, DR. HASKELL G.

Interviewer: Albert B. Christman

Date of Interview: September 11, 1970

Documentation: 13 page transcript

Abstract: Dr. Wilson discusses in general public attitudes toward the Navy and the armed services as a whole. He comments on the future of R&D installations and the changing military role of the Navy and the Marines.

Repositories: NWC, DTRC

Individuals Mentioned:

Zumwalt, ADM Elmo

WILSON, DR. HASKELL G.

Interviewer: Leroy L. Doig, III

Date of Interview: August 10, 1982

Documentation: Tape, 17 page transcript, index

Abstract: This interview was conducted to discuss the possible scope and some topical considerations of further volumes of the Center's administrative history. Mr. Wilson discusses some of the evolutionary aspects of NWC's history and philosophy, military-civilian relationships, the Center's Principles of Operation, changes in R&D emphasis, the Walleye production program, and the position of the DNL.

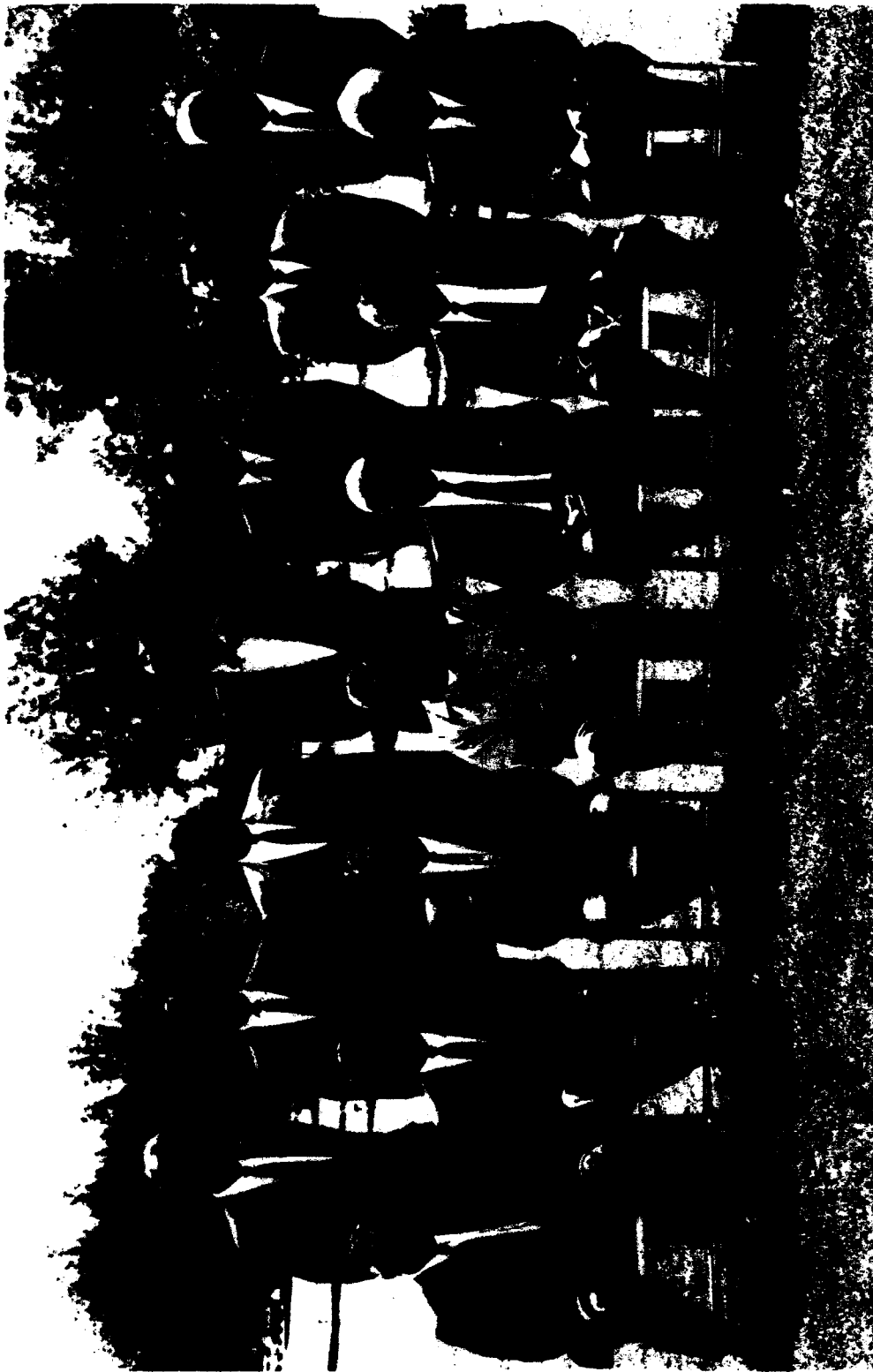
Repositories: NWC, NHC, DTRC

Individuals Mentioned:

Parsons, RADM William S.
Thompson, Dr. Louis T. E.

Institutions:

Naval Weapons Center



NAVAL ORDNANCE TEST STATION ADVISORY BOARD, 1966
FRONT LEFT TO RIGHT : VICE ADMIRAL P. D. STROOP, DR. G. W. JOHNSON,
DR. W. B. MCLEAN, NOTS, TECHNICAL DIRECTOR; CAPTAIN J. I. HARDY, NOTS,
COMMANDER; DR. J. A. WAKELIN, DR. C. C. LAURITSEN, DR. L. T. E. THOMPSON;
BACK LEFT TO RIGHT: DR. L. W. ALVAREZ, ADMIRAL J. H. SIDES,
REAR ADMIRAL R. BENNETT, DR. F. C. LINDVALL, DR. J. C. R. LICKLIDER,
H. G. "HACK" WILSON, NOTS, ASSOCIATE TECHNICAL DIRECTOR; DR. W. A. NOYES

Subjects:

Naval Weapons Center

Other Entries:

Director of Navy Laboratories

Management philosophy

Military-civilian relationships

R&D management

Vietnam war, laboratory support

WINGO, CARL H., JR.

Interviewer: Cynthia Rouse

Date of Interview: September 30, 1976

Documentation: 13 page transcript

Abstract: This interview is Chapter XI of Dahlgren, edited by Kenneth G. McCollum. Mr. Wingo describes the changes in ammunition testing since he came to Dahlgren in 1951, the effect of the Korean War, refitting the guns of the NEW JERSEY, the development of shipboard missiles and guided projectiles, lightweight guns, the Naval Gunnery Improvement Program, HIFRAG rounds, and EOSS.

Repositories: NSWC, DTRC

Individuals Mentioned:

Kirschke, Jim

Kitterman, Warren

Institutions:

Naval Ordnance Laboratory

Subjects:

Guided projectiles

Ordnance

Projectiles

Other Entries:

Electro-optical sensor system

Naval gunnery

USS NEW JERSEY

WINNICK, ROBERT L.

Interviewer: Albert B. Christman

Date of Interview: April 1978

Documentation: 1 tape, 26 page transcript

Abstract: Mr. Winnick discusses sonar and torpedo R&D work conducted at NUSC, including torpedo research during World War II. He talks about the

effect of the Bureaus and Systems Commands on torpedo development and his position as Director of Fleet Readiness. Winnick also comments on Naval reorganization in the late 1960's and 1970's.

Repositories: DTRC

Institutions:

Naval Sea Systems Command
Naval Underwater Systems Center
Systems commands

Other Entries:

Sonar
Torpedoes

WISLICENUS, DR. GEORGE F.

Interviewer: Nelson Wood

Date of Interview: August 21, 1980

Documentation: Tapes, transcript

Abstract: Dr. Wislicenus speaks of his background and education, his work with the OSRD and his research in acoustics.

Repositories: NUM

Institutions:

California Institute of Technology
National Defense Research Committee
Office of Scientific Research and Development

Other Entries:

Acoustics research

WITHINGTON, RADM FREDERICK S.

Interviewer: Cynthia Rouse

Date of Interview: November 3, 1976

Documentation: 12 page transcript

Abstract: This interview is Chapter XIII of Dahlgren, edited by Kenneth G. McCollum. RADM Withington describes his education, tours of different ordnance facilities in the 1920s, the primitive facilities at Dahlgren when he began work there, his work at the Naval Gun Factory on torpedo directors and gunfire control directors from 1934-1936, his work with the Bureau of Ordnance, his position as OIC at the Naval Ordnance Laboratory, White Oak MD, and later positions with AEC and Chief of BUORD, and individuals who had particular influence on Naval R&D.

Repositories: NSWC



ADMIRAL FREDERICK S. WITHINGTON (HEAD OF TABLE)
WITH BUREAU OF ORDNANCE STAFF, JUNE 1957

Individuals Mentioned:

Bradbury, Dr. Norris E.
Johnson, Dr. Ellis
Lauritsen, Dr. Charles C.

Leary, VADM Herbert F.
Tuve, Dr. Merle

Institutions:

Atomic Energy Commission
Bureau of Ordnance
Naval Gun Factory

Naval Proving Ground
Naval Weapons Laboratory

Subjects:

Gun directors
Ordnance
Torpedo directors

Other Entries:

Defense spending
Funding
Laboratory consolidations

WITTER, RADM RAYMOND

Interviewer: Dr. Joseph Marchese

Date of Interview: March 1, 1990

Documentation: 1 tape, 16 page transcript, index

Abstract: This interview is one in a series conducted to collect information about the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Witter initially gives background information regarding the Navy's undersea surveillance programs. He then elaborates on the rationale behind transferring the ASW programs into a systems command; and the evolution of PD 80, then SPAWAR's ASW Programs Directorate; and PD 80's relationship with the Director of Naval Warfare for the Office of the Chief of Naval Operations, OP-095. RADM Witter discusses the effects of the Defense Science Board's report as well as the cross-platform responsibility for ASW and the fiscal problems encountered by PD 80. Furthermore, he provides input regarding the coordination of programs between the Naval Air Systems Command, Naval Sea Systems Command, SPAWAR, Office of Naval Research, and the Office of Naval Technology. Finally, RADM Witter talks about his reorganization of PD 80, the effect of the Aspin report on the ASW program, and the interaction between PD 80 and SPAWAR 30, the WSA&E Directorate.

Repositories: DTRC

Individuals Mentioned:

Bisson, Dr. Arthur
Clark, VADM Glenwood
Dorman, RADM Craig
Fitzgerald, ADM James
High, David
Hogg, ADM James

Pittenger, RADM Richard
Rowden, VADM William
Saalfeld, Dr. Frederick
Selwyn, Dr. Philip
Weaver, RADM John
Wolkensdorfer, RADM Daniel



REAR ADMIRAL RAY C. WITTER, USN

Institutions:

Defense Science Board
Naval Air Systems Command
Naval Electronic Systems Command
Naval Sea Systems Command

Office of Naval Research
Office of Naval Technology
Office of the Chief of Naval Operations
Space and Naval Warfare Systems Command

Subjects:

Antisubmarine warfare (ASW)
Aspin Report
Disestablishment of NAVMAT
Establishment of SPAWAR
Funding
Integrated undersea surveillance system
Program coordination

Project Caesar
Soviet submarines
T-AGOS ships
Tactical electromagnetic programs
Walker-Whitworth spy case
Warfare systems architecture and engineering

WOLFF, DR. IRVING

Interviewer: Dr. David K. Allison

Date of Interview: April 6, 1979

Documentation: 1 tape, index

Abstract: An RCA physicist involved in radar research in the 1930s and 1940s interviewed in 1976 as part of an RCA history project, copies of the 2 tapes produced and an index prepared by Dr. Allison are also contained in the NRL oral history collection. Wolff discusses his background, education, contacts with the Army and NRL, personnel at NRL, the establishment of the Radiation Laboratory, contact with German engineers in the 1930s which suggested that both sides knew that the other was working on radar detection, and his connection with Isidor Rabi.

Repositories: NRL

Individuals Mentioned:

Rabi, Isidor I.
Ruble, ADM W. J.

Taylor, Dr. A. Hoyt
Zahl, Dr. Harold A.

Institutions:

Bell Laboratories
Radiation laboratory
Radio Corporation of America

U.S. Army Signal Corps
Victor Talking Machine Company

Subjects:

Microwave Radar
Radar

WOLKENSCHORFER, RADM DANIEL

Interviewer: Dr. Joseph Marchese

Date of Interview: February 28, 1990

Documentation: 1 tape, 13 page transcript, index

Abstract: This interview is one in a series conducted to collect information about the disestablishment of NAVMAT and the establishment of SPAWAR. RADM Wolkensdorfer discusses his professional background in ASW programs and efforts to coordinate and integrate such programs. He provides insight into the relationships between the Office of the Secretary of the Navy's ASW development organization with those in the Office of the Chief of Naval Operations and details efforts at integration of the Secretariat's ASW development office with other ASW offices. RADM Wolkensdorfer also give his opinions regarding the effectiveness of SPAWAR PD 80, formerly the ASW Programs Directorate, and its funding problems. He also considers its placement in SPAWAR. He then evaluates the roles of PD 80 and SPAWAR 30, the WSA&E Directorate, in ASW modeling and simulation.

Repositories: DTRC

Individuals Mentioned:

Bisson, Dr. Arthur	Pittenger, RADM Richard
Carlson, RADM William	Saalfeld, Dr. Frederick
Fitzgerald, ADM James	Selwyn, Dr. Philip
Garrett, H. Lawrence, III	Vincent, RADM William
Jackson, RADM Dempster	Waller, VADM Edward
Martell, VADM Charles B.	Witter, RADM Raymond

Institutions:

Defense Science Board	Office of Naval Technology
Lockheed Aerospace Corporation	Office of the Chief of Naval Operations
Naval Material Command	Operational Test and Evaluation Force
Naval Ocean Systems Command	Space and Naval Warfare Systems Command
Office of Naval Research	

Subjects:

Acoustics	Research and development
Antiair warfare	Submarines
Antisubmarine warfare (ASW)	Surveillance towed array sensor system
Establishment of SPAWAR	(SURTASS)

WORCHESEK, CAPT ROBERT R.

Interviewer: Roger Kempler

Date of Interview: August 31, 1982

Documentation: 26 page transcript

Abstract: CAPT Worchesek discussed the circumstances of his involvement with Naval personnel research, the people involved in the reorganization of the Navy's personnel R&D program, the CO/TD dual executive structure of the Navy Laboratories, the problems of justifying personnel R&D relative to hardware R&D, problems of rehabilitation of NOSC barracks spaces, the Research Liaison Office, close managerial control of NPRDC, prime movers in NPRDC development, its role as coordinator for Human Resources R&D, his major contributions during transition to a single center, his view on CNM management control, and a post-retirement view of the Center.

Repositories: NPRDC, DTRC

Individuals Mentioned:

Bagley, VADM David
Collins, Dr. John
Kinnear, RADM George E. R.

Ramras, Dr. Eugene
Sjoholm, Dr. Allan A.

Institutions:

Navy Personnel Research and Development Center

Subjects:

Personnel research

WORD, THOMAS J.

Interviewer: Leroy L. Doig, III

Date of Interview: November 27, 1982

Documentation: Tapes, 104 page transcript

Abstract: This is a special-subject focusing on Dr. William B. McLean, his philosophy, his management style, the people who worked around him, and his last years at NOSC, during which time Mr. Word worked closely with him.

ACCESS VERY LIMITED

Repositories: NWC

Individuals Mentioned:

Colladay, Dr. Glover S.
McLean, Dr. William B.
Wilcox, Douglas J.

Institutions:

Naval Electronics Laboratory
Naval Ocean Systems Center
Naval Ordnance Test Station

Naval Undersea Center
Naval Weapons Center

Subjects:

McLean, Dr. William B.

WORD, THOMAS J.

Interviewer: Leroy L. Doig, III

Date of Interview: November 28, 29, 1982

Documentation: Tapes, 94 page transcript

Abstract: Mr. Word talks about the political problems facing the Center at the time, management philosophies, productivity, and strangling bureaucracy. The A-76/CA contracting controversy is dealt with in some detail. He spends much time on people, especially Dr. McLean. ACCESS VERY LIMITED

Repositories: NWC

Individuals Mentioned:

Haff, CAPT William B.
Hillyer, Robert
Kistler, Dr. Richard E.

Knemeyer, Franklin H.
Lahr, CAPT John Jude
McLean, Dr. William B.

Institutions:

Naval Weapons Center

Subjects:

McLean, Dr. William B.
Naval Weapons Center

Other Entries:

Management

YORK, DR. HERBERT

Interviewer: Albert B. Christman

Date of Interview: September 24, 1980

Documentation: 1 tape, 40 page transcript

Abstract: Dr. York discusses the effect of Sputnik on Navy R&D, his position as Chief Scientist of ARPA, and his selection to be the first DDR&E. He talks about the reasons for DDR&E, its relationship with the services, and the uniformed Navy's success in keeping R&D projects under control. York describes DDR&E's contacts with high level government officials, major trends and problems he encountered as DDR&E, and his management style. He comments on SECDEF McNamara's effect on centralization of the armed forces, DDR&D and the general growth of bureaucracy, and why he left DDR&E. York also details the effect of increased R&D on the escalation of the arms race and trends in technology.

Repositories: DTRC

Individuals Mentioned:

Eisenhower, Dwight D.
McNamara, Robert S.

Institutions:

Advanced Research Projects Agency
Office of Secretary of the Navy

Subjects:

Director of Defense Research and Engineering

Other Entries:

Sputnik

YOUNG, DR. LEO C.

Interviewer: Stanford C. Hooper

Date of Interview: c. 1951-1952

Abstract: This interview is from the Stanford C. Hooper papers in the Library of Congress Manuscript Division. It is a duplication of tapes 150 and 151 of Hooper's series of tapes on the "History of Radio-Radar-Sonar." Young reminisces about the discovery and early development of radar at the Naval Research Laboratory, and a bit about his background.

Repositories: NRL, LC

Individuals Mentioned:
Hooper, RADM Stanford C.

Institutions:
Naval Research Laboratory

Subjects:
Radar
Radio detection

YOUNGBLOOD, CURTIS

Interviewer: Albert B. Christman

Date of Interview: May 1967

Documentation: 27 page transcript, index

Abstract: This interview was originally conducted as background for a biography of RADM William S. Parsons. Mr. Youngblood reminisces about his personal relationship with RADM Parsons at the Naval Proving Ground and during Operation Crossroads. He also talks about the chain of command at NPG; in particular, CAPT Hennick and Parsons' relationships with CAPT Hedrick, ADM Blandy, Dr. Louis T. E. Thompson, and Dr. Ralph Sawyer.

Repositories: NWC, DTRC, NHC

Individuals Mentioned:

Blandy, ADM George	Parsons, RADM William S.
Bradbury, Dr. Norris E.	Sawyer, Dr. Ralph A.
Hedrick, CAPT David	Thompson, Dr. Louis T. E.

Institutions:
Naval Proving Ground
Systems commands

Subjects:

Blandy, ADM George	Sawyer, Dr. Ralph A.
Hedrick, CAPT David	Thompson, Dr. Louis T. E.
Parsons, RADM William S.	

YOUNKIN, GENE

Interviewer: Elizabeth Babcock

Date of Interview: July 12, 1990

Documentation: 1 tape, 40 page transcript, index

Abstract: This interview is an account of Mr. Younkin's career in the Ballistics Division and the Sidewinder Missile Program. After recalling his days in the Naval Ocean Testing Center's ballistics division, Mr. Younkin offers an extended discussion of the Sidewinder Program. He elaborates on the early and rapid development of the program, and in particular on simulation work and the key personnel on the Sidewinder team. Finally, Mr. Younkin discusses the importance and training of project pilots.

Repositories: NWC, DTRC

Individuals Mentioned:

Benton, Dr. E. E.
Cartwright, Dr. W. Frank
Doig, Leroy L., III
Glatt, Evelyn
Haseltine, Dr. William R.
Jagiello, Leonard T.

McLean, Dr. William B.
Neal, Connie
Porter, William B.
Seeley, Nancy
Smith, Charles P.
Wilcox, Dr. Howard A.

Institutions:

Eastman Kodak
National Aeronautics and Space
Administration
Naval Ocean Testing Center

Naval Weapons Center
Aeroballistics Laboratory
Exterior Ballistics Division

Subjects:

Aeroballistics
Agile Missile Program
China Lake community
Digital computers (early development)

Hardware-in-the-loop simulators
Project pilots
Sidewinder Missile Project

ZISMAN, DR. WILLIAM A.

Interviewer: Steven Markel

Date of Interview: July 15, 16, 24, 1980

Documentation: 6 tapes

Abstract: Dr. Zisman discusses the American scientific community in the 1930's, problems of placement for Jewish scientists, and chemical research from 1937 to 1978. Included are two interviews with associates. Zisman came to NRL in 1933 and made major contributions to the development of synthetic lubricants, including pioneering research leading to the development of Teflon, and establishment of surface chemistry as a critical field of naval research.

Repositories: NRL

Institutions:

Naval Research Laboratory

Subjects:

Synthetic lubricants

Other Entries:

Chemical research

Surface chemistry

Teflon

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Ms. Mary Marshall Clark
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LC:

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Mr. James S. Kingston

NASM:

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NAVAIR:
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DSN 286-3793
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DSN 297-3419
Dr. David K. van Keuren

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USNI:
U.S. Naval Institute
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Annapolis, MD 21402
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Ms. Linda O'Doughda
Mr. Paul Stillwell

USNO:
U.S. Naval Observatory
34th and Massachusetts Avenue, NW
Washington, D.C. 20392
Mr. Steven J. Dick

ACRONYMS AND ABBREVIATIONS

AAW	Antiair Warfare
ACDS	Advanced Combat Direction System
ACIMD	Advanced Common Intercept Missile Demonstration
ACNO	Assistant Chief of Naval Operations
ADCAP	Advanced capabilities
ADM	Admiral
AEC	Atomic Energy Commission
AEEL	Aeronautical Electronics and Engineering Laboratory
AEW	Airborne Early Warning
AFB	Air Force Base
AIP	American Institute of Physics
AMAL	American Medical Acceleration Laboratory
AMRAAM	Advanced Medium Range Air-to-Air Missile
ARL/PSU	Applied Research Laboratory/Pennsylvania State University
ARPA	Advanced Research Projects Agency
ARM	Antiradiation Missile
ASN	Assistant Secretary of the Navy
ASN(R&D)	Assistant Secretary of the Navy (Research and Development)
ASN/RDA	Assistant Secretary of the Navy for Research, Development, and Acquisition
ASN(RE&S)	Assistant Secretary of the Navy (Research, Engineering & Systems)
ASP	All Altitude Spin Projectile
ASROC	Antisubmarine Rocket
ASW	Antisubmarine Warfare
ATOWG	Advanced Technical Objectives Working Group
BFIM	Battle Force Information Management
BFSE	Battle Force Systems Engineer
BGSE	Battle Group Systems Engineering
BUAER	Bureau of Aeronautics
BUBUDGET	Bureau of the Budget
BUMED	Bureau of Medicine and Surgery
BUORD	Bureau of Ordnance
BUPERS	Bureau of Naval Personnel
BUSHIPS	Bureau of Ships
BUSTAND	Bureau of Standards
BUWEPS	Bureau of Naval Weapons
BW/CW	Biological Warfare/Chemical Warfare
C3	Command Control, and Communications
C3I	Command control, communication and intelligence
CA	Commercial Activities
CAPT	Captain
CDR, CMDR	Commander
CEB	CNO Executive Board
CLPP	China Lake Pilot Plant
CHNAVMAT	Chief of Naval Material
CNM	Chief of Naval Material
CNO	Chief of Naval Operations
CNR	Chief of Naval Research
CO	Commanding Officer
COBOL	Common Business Oriented Language
COL	Colonel

ACRONYMS AND ABBREVIATIONS (Continued)

COMMO	Commodore
COMNAVAIR	Commander, Naval Air Systems Command
COMSPAWARSSYSCOM	Commander, Space and Naval Warfare Systems Command
DARPA	Defense Advanced Research Projects Agency
DCNM	Deputy Chief of Naval Material
DCNM(D)	Deputy Chief of Naval Material (Development)
DCNM(L)	Deputy Chief of Naval Material (Laboratories)
DCNO	Deputy Chief of Naval Operations
DDRAT	Director Defense Research and Technology
DDRE	Director of Defense Research and Engineering
DIFAR	Directional Finding and Ranging
DLP	Director of Laboratory Programs
DNA	Defense Nuclear Agency
DNL	Director of Navy Laboratories
DNSARC	Department of the Navy Systems Acquisition Review Council
DOD	Department of Defense
DON	Department of the Navy
DRDT&E	Director, Research, Development, Test and Evaluation
DSARC	Defense Systems Review Council
DSB	Defense Science Board
DTMB	David Taylor Model Basin
DTNSRDC	David W. Taylor Naval Ship Research and Development Center
DUSRAT	Deputy Under Secretary for Research and Technology
EDO	Enginering Duty Officer
EES	U.S. Navy Engineering Experiment Station
EMB	Experimental Model Basin
ENIAC	Electronic Numerical Integrator and Computer
EOSS	Electro-Optical Sensor System
FAA	Federal Aviation Administration
FADM	Fleet Admiral
FAE	Fuel-air Explosive
FBM	Fleet Ballistic Missile
FCRC	Federal Contract Research Center
FOSS	Fiber-Optic Sensor System
FSAT	Full-scale aerial target
FY	Fiscal Year
GAO	General Accounting Office
GEN	General
GUPPY	Greater Underwater Propulsive Power
HARM	High-Speed Antiradiation Missile
HIFRAG	High Fragmentation
HQ	Headquarters
HVAR	High-velocity Aircraft Rocket
IBM	International Business Machines
IDA	Institute for Defense Analysis
IG	Inspector General
IGY	International Geophysical Year
IR/IED	Independent Research/Independent Exploratory Development
JASON	A task force active in the 1970s

ACRONYMS AND ABBREVIATIONS (Continued)

JATO	Jet Assisted Take-Off
JCS	Joint Chiefs of Staff
JHU/APL	Johns Hopkins University/Applied Physics Laboratory
JPL	Jet Propulsion Laboratory
LAHV	Light Airborne ASW Vehicle
LAB	Laboratory Advisory Board
LAMPS	Light Airborne Multi-Purpose System
LC	Library of Congress
LOFAR	Low Frequency Acquisition and Ranging
LORAN	Long Range Navigation
LST	Landing Ship, Tank
LTC	Lieutenant Colonel
LTGEN	Lieutenant General
LUS	Laboratory Utilization Study
MAJ	Major
MAT	NAVMAT organizational code prefix
MDL	Mine Defense Laboratory
MEL	Marine Engineering Laboratory
MILCON	Military Construction
MIT	Massachusetts Institute of Technology
MK	Mark
MP	Material Professional
NACA	National Advisory Committee on Aeronautics
NADC	Naval Air Development Center
NAEC	Naval Air Engineering Center
NAMU	Naval Air Modification Unit
NAPC	Naval Air Propulsion Center
NASA	National Aeronautics and Space Administration
NASL	Naval Applied Science Laboratory
NASM	National Air and Space Museum
NATC	Naval Air Test Center
NATO	North Atlantic Treaty Organization
NAVAIR, NAVAIRSYSCOM	Naval Air Systems Command
NAVELEX	Naval Electronic Systems Command
NAVMAT	Naval Material Command
NAVORD, NAVORDSYSCOM	Naval Ordnance Systems Command
NAVSEA, NAVSEASYSYSCOM	Naval Sea Systems Command
NAVSEC	Naval Ship Engineering Center
NAVSTAR	Navy Navigation Satellite
NCEL	Naval Civil Engineering Laboratory
NCSL	Naval Coastal Systems Laboratory
NDRC	National Defense Research Committee
NEL	Naval Electronics Laboratory
NELC	Naval Electronics Laboratory Center
NGCR	Next generation computer resource
NHC	Naval Historical Center
NIF	Navy Industrial Fund
NMARC	Navy and Marine Corps Acquisition Review Committee
NMC	Naval Material Command
NMTS	Naval Mine Warfare Test Station
NOL	Naval Ordnance Laboratory
NOL C	Naval Ordnance Laboratory (Corona)
NOL W/O	Naval Ordnance Laboratory (White Oak)

ACRONYMS AND ABBREVIATIONS (Continued)

NORC	Naval Ordnance Research Calculator
NORDA	Naval Ocean Research and Development Activity
NOSC	Naval Ocean Systems Center
NOTS	Naval Ordnance Test Station
NOTSNIK	NOTS Satellite
NPG	Naval Proving Ground
NPRA	Navy Personnel Research Activity
NPRDC	Navy Personnel Research and Development Center
NRAC	Naval Research Advisory Committee
NRDC	Naval Research and Development Center
NRDL	Naval Radiological Defense Laboratory
NRDU-V	Navy Research Development Unit, Vietnam
NRL	Naval Research Laboratory
NTS	Naval Torpedo Station, Newport, RI
NSAP	Navy Science Assistance Program
NSF	National Science Foundation
NSRDC	Naval Ship Research and Development Center
NSSNF	Naval Strategic Systems Navigation Facility
NSTEP	Navy Scientist Training Exchange Program
NSWC	Naval Surface Warfare Center
NTDS	Navy Tactical Data Systems
NUC	Naval Undersea Center
NURDC	Naval Undersea Research and Development Center
NURDU	Naval Undersea Research and Development Unit
NUWRES	Naval Underwater Weapons Research and Engineering Station
NUSC	Naval Underwater Systems Center
NUSL	Naval Underwater Sound Laboratory
NWAG	Naval Warfare Advisory Group
NWC	Naval Weapons Center
NWCM	Naval War College Museum
NWL	Naval Weapons Laboratory
OASD	Office of the Assistant Secretary of Defense
OCNR	Office of the Chief of Naval Research
ODDR&E	Office of the Director of Defense Research and Engineering
OIC	Officer in Charge
OMB	Office of Management and Budget
ONAS	Office of Naval Acquisition Support
ONR	Office of Naval Research
OPNAV	Office of the Chief of Naval Operations
ORL	Ordnance Research Laboratory
OSD	Office of the Secretary of Defense
OSRD	Office of Scientific Research and Development
PEO	Program Executive Officer
PERT	Program Evaluation Review Technique
PMTC	Pacific Missile Test Center
PRFA	Personnel Research Field Activity
RADM	Rear Admiral
RAM	Rolling Airframe Missile
RCA	Radio Corporation of America
R&D	Research and Development
RD&A	Research, development, and acquisition
RDT&E	Research, Development, Testing and Evaluation
REAC	Research Calculator

ACRONYMS AND ABBREVIATIONS (Continued)

REFLEX	Resources Flexibility
RIF	Reduction in Force
SARAH	Semi-Active Radar Homing
SARS	Selected Acquisition Reporting System
SDI	Strategic Defense Initiative
SDRV	Submarine Deep Rescue Vehicle
SEAL	Sea, Air, and Land
SECDEF	Secretary of Defense
SECNAV	Secretary of the Navy
SER	Shore Establishment Realignment
SES	Senior Executive Service
SES	Surface Effect Ships
SOFAR	Sound Fixing and Ranging
SOLRAD	Solar Radiation
SOSUS	Sound Surveillance System
SPAWAR, SPAWARSSYSCOM	Space and Naval Warfare Systems Command
SPO	Special Projects Office
SSPO	Strategic Systems Project Office
STILO	Science and Technical Intelligence Liaison Office
SUBROC	Submarine Rocket
SURTASS	Surveillance Towed Array Systems
SWPP	Salt Wells Pilot Plant
SYSCOMS	Systems Commands
T/E	Test and Evaluation
TD	Technical Director
TLWR	Top Level Warfare Requirements
UCLA	University of California, Los Angeles
USA	United States Army
USAF	United States Airforce
USDR&E	Under Secretary of Defense Research and Engineering
USNA	United States Naval Academy
USNI	United States Naval Institute
USNR	United States Navy Reserve
VADM	Vice Admiral
VCNO	Vice Chief of Naval Operations
VLAP	Vietnam Laboratory Assistance Program
V/STOL	Vertical Short Take-Off and Landing Aircraft
WAVES	Women Accepted for Voluntary Emergency Service
WSA	Warfare Systems Architecture
WSA&E	Warfare Systems Architecture and Engineering
WSE	Warfare Systems Engineering
WSCID	Warfare Systems Controlled Interface Document
WSSA	Weapons Systems Support Activities
WSSF	Weapon System Simulation Facility

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